

Courses for MSHA and the Mining Industry



U.S. Department of Labor
Mine Safety and Health Administration

FY 2004



**Dedicated to the Health and Safety
of the Nation's Miners**

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Courses for MSHA and the Mining Industry



U.S. Department of Labor
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Secretary

Mine Safety and Health Administration
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FY 2004

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WELCOME



Welcome to the 2004 edition of Courses for MSHA and the Mining Industry.

Our Nation's mines produce more material than ever before. Sophisticated machinery and equipment allow miners to work in areas that are often complex and dangerous. Mining technology changes constantly and every mine is unique. This is why mine safety and health inspections, technical and engineering assistance, and education and training are such important elements in ensuring a safe workplace. These are the three elements of MSHA's triangle of success.

Up-to-date and practical health and safety training is vital since mining occurs in a hazardous, ever-changing environment where there is little room for error.

The National Mine Health and Safety Academy, in Beaver, West Virginia, is the world's largest institution devoted to health and safety in mining. It is a central training facility for Federal mine safety and health inspectors, mine safety professionals, other government agencies, the mining industry, and labor.

Most of the Academy's courses are open to participants from throughout the mining community. Classes are taught by Academy faculty and associate instructors and specialists from the mining industry, trade associations, colleges and universities, manufacturers, and other government agencies.

Whatever your interest in mine health and safety, you should find useful and practical training at the National Mine Health and Safety Academy.

HISTORY

Protecting those who work in our Nation's mines requires an awareness and understanding of the conditions that endanger their health and safety.

This problem was recognized more than 135 years ago when a proposal for a Federal mining bureau was submitted to Congress. It was not until nearly five decades later that a series of deadly mine explosions led to passage of the Organic Act of 1910. That act created the Bureau of Mines.

Laws passed over the next 60 years enlarged the scope of legislation aimed at reducing mining hazards. The Federal Coal Mine Health and Safety Act of 1969 contained provisions for the training of Federal mine safety and health inspectors, as well as establishing education and training for states, mine operators, and miners. The Federal Mine Health and Safety Act of 1977 broadened these provisions to include metal and nonmetal mining. The National Mine Health and Safety Academy exists to meet the requirements of the 1977 Act.

THE ACADEMY'S PURPOSE AND GOAL

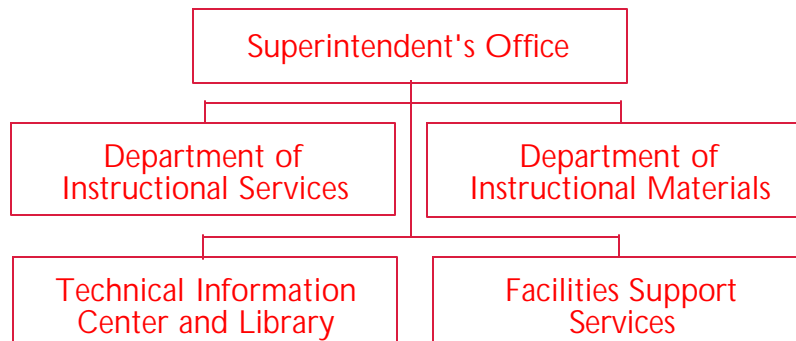
The purpose of the Academy is to design, develop, and conduct instructional programs that will assist in government, industry, and labor efforts to reduce injuries, illnesses, and fatalities in the mineral industries.

All of our programs, seminars, and courses are prepared with one idea in mind - the improvement of health and safety conditions in mines through education and training. This is our goal. Our success will be measured by the extent to which mine accidents and unhealthful conditions are reduced in future years.

ACADEMY ORGANIZATION

The National Mine Health and Safety Academy is supported by the Superintendent's Office with the help of four major units:

- ◆ Department of Instructional Services
- ◆ Department of Instructional Materials
- ◆ Facilities Support Services
- ◆ Technical Information Center and Library



The **Superintendent** is responsible for the immediate management and direction of the Academy and for coordination of all training programs.

The **Department of Instructional Services** conducts training classes for coal and metal/nonmetal mine safety and health inspectors and other mine health and safety professionals. The department also develops, revises, and evaluates course materials and other programs used to train persons from MSHA and all segments of the mining community. In addition, the department administers individualized study materials for nonresident students.

The **Department of Instructional Materials** researches and develops audiovisual and graphic items to provide support to the mining industry. The department also oversees printing, storage, and distribution of Academy-produced training materials.

Facilities Support Services aids all Academy programs through coordination of student services, scheduling, recordkeeping, physical plant maintenance, budget and procurement, property management, wellness, and contract administration.

The **Technical Information Center and Library** maintains books, journals, newspapers, technical reports, audiovisual materials, and other information related to mine health and safety. The library gives Academy students and clients immediate and easy access to information sources that can improve the health and safety of miners worldwide.

The Academy Campus

The Academy complex includes classrooms and laboratories to accommodate 600 students and Residence Hall space for 174 people.

The **Classroom Building** includes 14 classrooms and 10 laboratories.

The **Technical Information Center and Library** is in the Classroom Building.

The **Administration Building** contains faculty and staff offices, the auditorium, cafeteria, and student store.

The **Mine Machinery Laboratory** gives students an opportunity for hands-on health and safety training on different mining and electrical systems.

The **Mine Simulation Laboratory** is an aboveground simulated mine. Here, students can learn about mine ventilation, mine rescue, mine emergency preparedness, and firefighting.

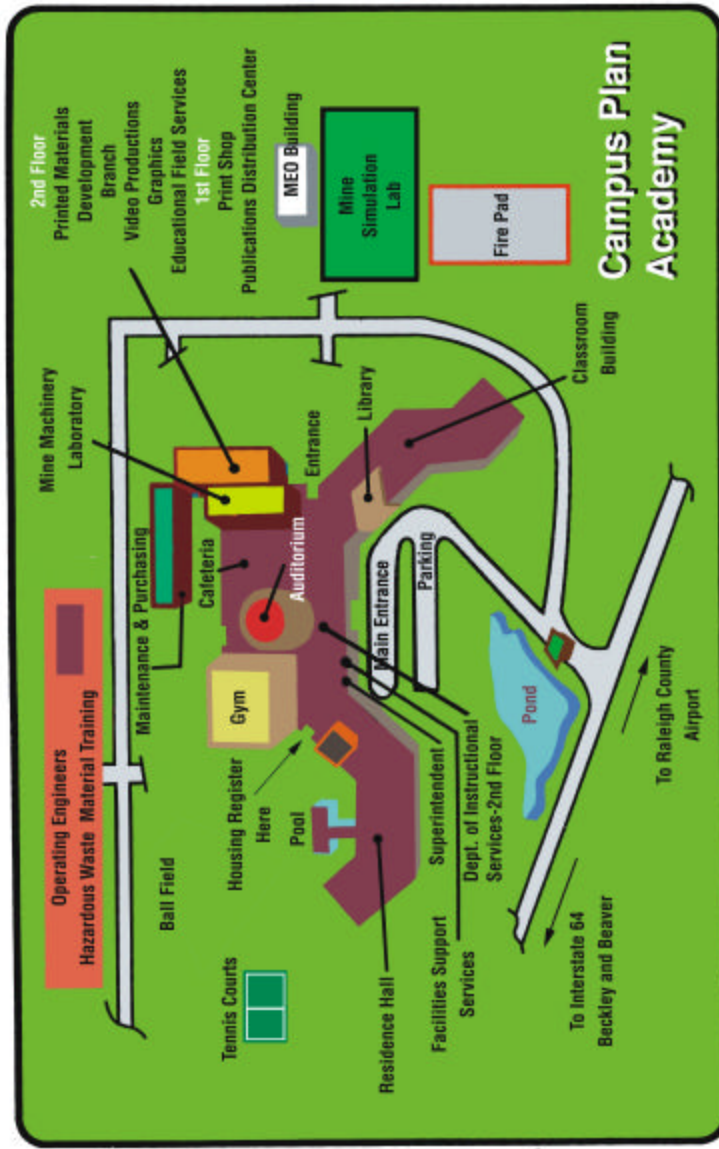
The **Mine Emergency Building** is adjacent to the Mine Simulation Laboratory. It houses mine emergency vehicles and a mine rescue station for MSHA's Mine Emergency Units.

The **Gymnasium** is available for wellness training and leisure time activities. Other wellness facilities at the Academy include tennis courts, a racquetball court, swimming pool, jogging trail, and athletic field.

The **Maintenance and Equipment Building** is used to maintain Academy equipment.

The **Publications Distribution Center** houses the print shop, supply and warehouse facilities, and the Department of Instructional Materials.

The **Residence Hall** has 174 units. Each room in the residence hall has a queen-size bed or two twin beds, a private bath, telephone, desk, storage area, refrigerator, coffee pot, and iron and ironing board.



ACADEMIC PROGRAMS

MSHA Training

All newly hired MSHA mine safety and health inspectors receive entry-level training. This training covers technical aspects of mine inspection and additional topics such as effective communications and professionalism.

Entry-level coal mine safety and health inspectors take eight modules of instruction (25 weeks total) at the Academy with on-the-job (OJT) sessions in the field between modules.

Entry-level metal/nonmetal mine safety and health inspectors' training includes seven modules of instruction (23 weeks total) at the Academy with OJT sessions in the field between modules.

Journeyman training presents up-to-date technical and regulatory information to journeyman mine safety and health inspectors to help them ensure that the mining community is served most effectively. The Academy also presents courses to provide journeymen with more in-depth training on special subjects.

Technical Specialists receive training in a variety of subjects so that they remain informed regarding current technical and regulatory information.

MSHA supervisors receive a two-week training program every two years. This course reviews leadership, professional and communication skills.

Administrative and clerical personnel receive an annual one- week training program to enhance their ability to assist MSHA personnel and clients.

The Academy offers computer training on various software applications to MSHA personnel and others from the mining industry and other government agencies.

Training for Industry

All Academy courses are open to participants from throughout the mining community. These programs are taught by Academy and visiting outside instructors and specialists from the mining industry, trade associations, colleges and universities, manufacturers, and other government agencies. Seminars, workshops, and conferences are offered during the year, both at the Academy and at sites throughout the country.

Many courses provide certification or qualification to persons who take mandated examinations.

Examples of other courses available to the industry are Electrical Safety for Miners, Hoists and Elevators, Instructor Training Workshop (Part 48), Construction and Repairs Safety, Mine Elevator Inspection Program Training, Noise Hazards, Regulation and Control, and Surface Facilities and Coal Preparation.

Training activities in the Mine Simulation Laboratory cover mine rescue, firefighting, mine emergency response, simulated inspections, ventilation, roof control, haulage, annual refresher subjects, supervisory training, and mine examination. Students come from MSHA, other Federal and state agencies, industry, labor organizations, and international mining delegations.

ACADEMIC LIFE

Class Attendance

Classes are informal and dress is casual. Most of our laboratory classes include hands-on activities or outside fieldwork.

A typical class day begins at 8:00 a.m. and ends at 4:00 p.m. All other day classes end by 5:00 p.m., unless otherwise scheduled.

Absences from class are approved for personal illnesses, emergencies, or death in a student's family. Students notify their supervisor and instructors, and make up work assigned while absent.

Grading System

The Academy uses a grading system for entry-level (coal and metal/nonmetal) courses of study and gives examinations in these classes. These grades are recorded, and students are informed of their progress through periodic grade reports.

Units of Credit/Certificates of Participation

Students receive Continuing Education Units (CEUs) upon completion of an Academy program. One CEU is 10 contact hours of participation in an educational experience. The Academy does not grant degrees, but CEUs may be converted into hours of credit at other institutions.

Students who satisfy the Academy criteria for successful completion of any course of study receive a Certificate of Completion documenting the course title, date, and CEUs.

College Credit for Academy Courses

Mine safety and health inspectors can earn an **Associate of Applied Science Degree in Occupational**

Development: Mine Inspection from the Community and Technical College of Marshall University, Huntington, West Virginia. This program is a cooperative effort among MSHA, the National Council of Field Labor Locals, the U.S. Department of Labor's Bureau of Apprenticeship and Training, and the university. Marshall will award 43 credit hours to students who complete the equivalence of the mine inspector apprentice requirements. These credits are applied to successful completion of the classroom and on-the-job training parts of Entry Level Mine Inspector training. An additional 22 hours of general education credits are also required.

Academic Dishonesty

The student can be disciplined or dismissed from the Academy for cheating, dishonesty, plagiarism, or knowingly furnishing false information to the Academy.

Withdrawal

The student may withdraw from an Academy program without penalty because of injury or other extenuating circumstances. If you withdraw, you will not receive credit for the courses of study in which you were enrolled.

Transcripts

You may request (in writing) a copy of your academic record. Your request must include your full name, and Social Security number. Submit your request to:

National Mine Health and Safety Academy
Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

FAX: (304) 256-3251

STUDENT LIFE

Food Service and Student Store

Academy food service offers complete meals in a cafeteria setting. You may choose from a selection of freshly prepared entrees and desserts with a full range of beverages available to complement your meal. There is also a made-to-order deli and a salad bar. Heart-healthy and vegetarian selections are also available. Food service personnel can assist anyone who has special dietary needs. A cash-only snack bar is open after 5:00 p.m. If you are an MSHA employee, you will receive a meal card when you check in. Present this card to the cashier after you go through the serving line. Non-MSHA students who are in residence must pay for lodging and meals.

The student store, located next to the cafeteria, has a wide variety of sundries, souvenirs, and gifts.

For Your Health and Safety

Please observe all posted speed limits and all traffic and parking signs.

If you need emergency medical attention, please dial "0" or ext. 555 and request medical assistance. Academy personnel will take you to a medical facility in an Academy vehicle or arrange for an ambulance. If there is no answer, dial 9-911 (Raleigh County Emergency Operations Center) and request medical assistance.

Assistance in completing accident health insurance claim forms for Federal students may be obtained from your class coordinator or a responsible staff person on duty after normal duty hours.

You play an important part in accident prevention at the Academy. Should you see an actual or poten-

tial safety hazard, please report it to an instructor, class coordinator, or any Academy staff person.

Mail

You can send or receive mail (Monday through Friday) at the Residence Hall registration desk. Our mailing address is:

National Mine Health and Safety Academy
1301 Airport Road
Beaver, WV 25813-9426

Vehicles

Students are required to register vehicles with security personnel at the main entrance to Academy grounds. You will receive a color-coded parking permit that allows you to park in a designated area. There is ample, well-lighted, and secure parking at the Academy.

FEES AND BILLING

Academy fees are reviewed periodically and subject to change.

Tuition

The Academy will charge tuition fees to all persons attending Academy courses, except employees of Federal, State, or local governments, persons attending the Academy under a program supported through an MSHA State grant, and persons performing a direct service.

The tuition amount indicated by the course announcement is due on arrival by check, money order, or credit card (VISA and MasterCard) payable to MSHA Finance. We regret that **we cannot accept cash**. Billing is possible with a written request to the Academy's Student Services Branch. If tuition is submitted in advance, written notification of withdrawal to the Student Services Branch is required to process a full refund.

Lodging

All persons in residence at the Academy, except MSHA personnel, other persons performing a direct service for MSHA, and persons attending a program supported through an MSHA State Grant, are charged for lodging.

The lodging fee is \$41.00 per person per day for a single room and \$54.00 per day for a double room. Note that these fees are reviewed at the end of each fiscal year (September 30) and may be changed at that time. Lodging fees are due on arrival by credit card (VISA and MasterCard) or check/money order payable to MSHA Finance. We regret that **we cannot accept cash**. Billing is possible with a written request to the Student Services Branch.

Persons staying at the Academy may have their spouses and immediate family as guests provided all appropriate fees are paid on arrival. Advance reservations are required.

If you have special needs, please contact Student Services before your arrival.

Meals

Participants who pay for Academy lodging may register for meals when they check in. Students staying in the dorm are normally required to purchase a meal ticket for breakfast and lunch at the Academy. Dinner is optional. Prices are:

Breakfast	\$8.00
Lunch	\$10.00
Dinner	\$13.00

Note that these fees are reviewed at the end of each fiscal year (September 30) and may be changed at that time.

Participants paying for their meals in the cafeteria may do so by cash, major credit card, or check/money order payable to the West Virginia Society for the Blind.

TRAVEL TO THE ACADEMY

Located on a plateau in southern West Virginia, the Academy blends into its Appalachian mountain setting. Scenic vistas and wildlife greet travelers to the Academy, and students experience a restful environment.

Several travel options are available:

By Air



Beckley, West Virginia - The Raleigh County Memorial Airport is located 1 mile from the Academy. Free transportation is furnished to the Academy by using the courtesy phone in the airport lobby (dials automatically when you lift the receiver). If there is no answer, call 256-3100.

Charleston, West Virginia - The Yeager Airport is located 65 miles north of the Academy. Rental cars are available.

Lewisburg, West Virginia - The Greenbrier Valley Airport is located 47 miles east of the Academy. Rental cars, taxis, and limousines are available.

By Train



AMTRAK provides tri-weekly service to and from Prince, West Virginia - located 16 miles from the Academy. Taxi service meets all trains.

By Bus



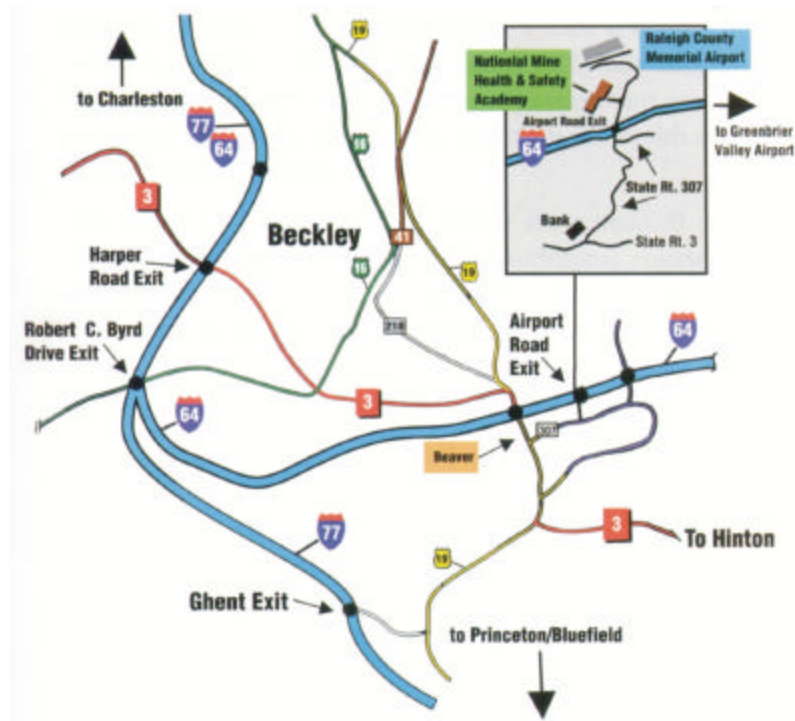
Daily Greyhound service is available to and from Beckley; the station is located 8 miles from the Academy in downtown Beckley. Taxi service is available.

By Car



See Route Map to the Academy on page 16.

Route Map to the Academy



Arriving from the NORTH

- ◆ When using U.S. 19 South, go to and follow I-77 South, exit at I-64 East
- ◆ Follow I-64 to EXIT 125B, Airport Road
- ◆ Academy is 1 mile on left

Arriving from the EAST

- ◆ When using I-64 West, use Exit 125, Beaver/Airport Road
- ◆ Turn RIGHT at bottom of ramp
- ◆ Academy is 1 mile on left

Arriving from the SOUTH

- ◆ When using I-77 North, exit and follow I-64 East
- ◆ Use EXIT 125B, Airport Road
- ◆ Academy is 1 mile on left

Arriving from the WEST

- ◆ When using I-64 East, use Exit 125B, Airport Road
- ◆ Academy is 1 mile on left

TRAINING COURSES

The National Mine Health and Safety Academy develops and presents courses of study which cover a wide spectrum of mine health and safety subjects. These courses of study address training needs of miners, mine safety and health inspectors, government and industry personnel, and others concerned with the health and safety of our Nation's miners.

The courses described in this catalog are scheduled or can be scheduled during the coming year. Additional courses can be scheduled to meet specific needs of miners, mine operators, and mine health and safety specialists.

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METAL/NONMETAL INSPECTION COURSES

Journeyman Training

All metal and nonmetal mine safety and health inspectors will attend one week of training per year, or two weeks every other year. The training will be in a seminar format with subjects in various specialty areas. The MSHA Training Committee has established a working group to determine the training needs of metal and nonmetal journeyman mine safety and health inspectors. A list of dates and subjects are on page 35.

The additional courses described in this section are designed for journeyman metal and nonmetal mine safety and health inspectors and Federal, state, mining industry, and labor organization personnel.

Course dates are given at the bottom of the course description.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course will then be scheduled.



If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

To Enroll Contact:

National Mine Health and Safety Academy
Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3252

FAX: (304) 256-3251

BLASTING (SURFACE)

[EX316M]



This course discusses the characteristics and use of explosives and blasting agents. It is designed to teach blasting standards in accordance with Institute Makers of Explosives (IME) guidelines and the Code of Federal Regulations (30 CFR). The course is structured for MSHA metal/nonmetal safety and health inspectors and industry personnel.

Contents:

- ◆ Definitions
- ◆ Transportation and Storage of Explosives and Blasting Agents
- ◆ Detonation Units
- ◆ Misfires
- ◆ Electric and Nonelectric Blasting Operations
- ◆ Explosives Hazards and Accidents
- ◆ Safe Blasting Principles (Work Procedures and Blast Plans)
- ◆ Initiation Systems

Technical Coordinator: Wayne L. Lively

Course Length: 3 days

Tuition: \$231.00

Dates: March 2-4, 2004

BLASTING (UNDERGROUND)

[EX318M]



This course discusses the characteristics and use of explosives and blasting agents. It is specifically designed to teach blasting practices used in underground metal/nonmetal mines. It will discuss the standards and guidelines specified by Institute Makers of Explosives (IME), Alcohol, Tobacco and Firearms (ATF), and the Code of Federal Regulations (30 CFR). The course is structured for MSHA safety and health inspectors and industry personnel.

Contents:

- ◆ Definitions
- ◆ Underground Storage Requirements
- ◆ Underground Transportation and Use of Explosives and Blasting Agents
- ◆ Detonation Units
- ◆ Explosive Product Display and Discussion
- ◆ Misfires
- ◆ Electric and Nonelectric Blasting Operations
- ◆ Explosives Hazards and Accident Discussion
- ◆ Safe Blasting Principles (Underground Work Procedures, Blast Plans, Security Measures, and Prudent Engineering Practices)
- ◆ Initiation Systems

Technical Coordinator: Wayne L. Lively

Course Length: 2 days

Tuition: \$154.00

Dates: September 8-9, 2004

ELECTRICAL HAZARDS

[EL301M]



This course is designed to provide practical methods and techniques for the identification of electrical hazards and the appropriate enforcement actions to be taken. This course is designed for MSHA metal/nonmetal inspection personnel with little or no electrical expertise.

Contents:

- ◆ Basic Electrical Theory
- ◆ Basic Circuitry
- ◆ Grounding
- ◆ Power Distribution Systems
- ◆ Inspection of Electrical Equipment
- ◆ Regulations and Policies
- ◆ Hazard Recognition
- ◆ Citations and Orders
- ◆ Personal Safety

NOTE: *This course is not for Electrical Specialists. Courses for Electrical Specialists are offered under Technical Specialists Training on page 113.*

Technical Coordinator: Roy Milam
Course Length: 3 days
Tuition: \$231.00
Dates: October 28-30, 2003
March 2-4, 2004
Additional courses can be scheduled upon request

GROUND CONTROL HAZARDS [RC301M]



This course will focus on the Code of Federal Regulations (30 CFR) requirements related to ground control at surface and underground metal and non-metal mines. The course provides techniques for the recognition and correction of ground control hazards.

Contents:

- ◆ Highwalls
- ◆ Stockpiles
- ◆ Basic Geology
- ◆ Rock Fixtures
- ◆ Surface Structures
- ◆ Underground Support
- ◆ Hazard Recognition
- ◆ Compliance Determination

Technical Coordinator: Tom Bonifacio

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

HAULAGE (SURFACE)

[HL301M]



Haulage accidents have been the leading cause of fatal accidents for several years at our Nation's surface mines. This course teaches how to recognize the hazards that may exist in surface haulage, and is taught by former surface coal and metal/nonmetal mine safety and health inspectors.

Contents:

- ◆ Compliance Determination of 30 CFR Parts 56/57.9000 and 56/57.14000
- ◆ Inspection Procedures for Surface Mining Equipment
- ◆ Use of Signs and Traffic Control on Mine Property
- ◆ Haul Road Design
- ◆ Brake Systems
- ◆ New Technology (video cameras)
- ◆ Rollover Protective Structures (ROPS)
- ◆ Falling Object Protective Structures (FOPS)
- ◆ Tire and Rim Safety
- ◆ Overview of Fatal Accidents

Technical Coordinator: Tom Bonifacio

Course Length: 3 days

Tuition: \$231.00

Dates: August 3-5, 2004

***Additional courses can be
scheduled upon request***

HEALTH HAZARDS

[IH302M]



This course is designed for metal and nonmetal mine safety and health inspectors. **Other interested individuals should contact the technical coordinator.** Classroom activities and laboratory exercises cover the recognition and evaluation of health hazards and how to determine enforcement responsibilities. Based on hypothetical health hazard situations, students will be required to write the appropriate health citations/ orders and will be required to defend their decisions. The final activity will involve a simulated courtroom exercise where the students will role play MSHA and industry personnel litigating these citations/orders.

Contents:

- ◆ Airborne Contaminants
- ◆ Noise and Other Physical Agents
- ◆ Sampling and Detecting Devices
- ◆ Personal Protective Equipment
- ◆ Confined Spaces
- ◆ Ergonomics
- ◆ Computer Programs - Metal/Nonmetal Health and Toxicity Files
- ◆ Hazard Controls

NOTE: *Metal/nonmetal mine safety and health inspectors will need to bring their Metal/Nonmetal Health Handbook.*

Technical Coordinator: William D. McKinney

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

INSPECTOR'S PORTABLE APPLICATIONS FOR LAPTOPS (IPAL) REVIEW – METAL/NONMETAL [CT307M]

The IPAL review course is designed for MSHA metal/nonmetal mine safety and health inspectors. The course reviews the latest version of the IPAL Program. The course also covers the fundamentals of the computer operating system, troubleshooting, and how to use the computer to reference resource material stored in the computer.

Contents:

- ◆ IPAL (Inspector's Portable Applications for Laptops)
- ◆ Reference Material (30 CFR, Mine Act, PPM, Policy Information Letters, and Program Information Bulletins)
- ◆ Basic Troubleshooting and Maintenance of the Laptop Computer and the IPAL Program
- ◆ Using Citrix Metaframe

Technical Coordinator: Betty Hogan

Course Length: 2 days

Tuition: None

Dates: *Scheduled upon request*



**MARSHALL UNIVERSITY MASTERS
OF SAFETY DEGREE (MINING
EMPHASIS)
[NEMU003]**

Courses will be offered pursuant to the Masters of Safety Degree (Mining Emphasis) program offered at the Academy through Marshall University.

Students must be admitted into the program **prior** to taking the courses. Application for Graduate Admission forms may be obtained by calling John Forte at (304) 256-3321.

College Chemistry 201, Math 130, and Physics 101 are prerequisites for admission to this program, as is a minimum undergraduate GPA of 2.5.

For information on spring, summer, and fall classes, contact John Rosiek at (304) 256-3211.

Technical Coordinators: John Rosiek
John Forte

Tuition: \$270 for each class for
MSHA employees
\$540 for non-MSHA employees

Dates: Spring 2004
Summer 2004
Fall 2004

MINE ACCIDENT INVESTIGATION AND REPORT WRITING

[IV301G]

This course is for coal, metal/nonmetal, technical support, EPD, and other MSHA individuals involved in accident investigation. **Other interested individuals should contact the Technical Coordinator.** The course reviews basic guidelines, procedures, and techniques used to investigate and report on accidents and other incidents involving health and safety in the mining industry.

Classroom activities and discussions cover reasons for accident investigations, the investigative process, data collection, accident reconstruction, proper analysis for corrective actions, and completion of investigative reports following relevant MSHA guidelines and policies. At the conclusion of the class, in a practical exercise, students conduct a simulated accident investigation and prepare a report. **Students should bring their laptop computers.**

Contents:

- ◆ Overview of Accident Investigation
- ◆ Pre-Investigation Activities
- ◆ Dealing with Family Members
- ◆ Accident Reconstruction
- ◆ Photography/Sketching
- ◆ Interviewing Techniques
- ◆ Data Collection and Evaluation
- ◆ Developing Conclusions and Corrective Actions
- ◆ Report Writing
- ◆ TapRoot®

Technical Coordinators: Kenneth M. Scott
Roy Milam
Scott Mandeville

Course Length: 8 days

Tuition: None

Dates: January 6-15, 2004
March 16-25, 2004
July 13-22, 2004
September 14-23, 2004



SLOPE AND SHAFT SINKING SAFETY [RC310G]

This course will include a description of the most common conventional slope and shaft construction process, the hazards associated with slope and shaft work, and inspection procedures. It will also discuss the hazards associated with hoisting and cover the inspection procedures for wire ropes.

Contents:

- ◆ Slope and Shaft Construction Process
- ◆ Ventilation
- ◆ Ground Control
- ◆ Hoisting
- ◆ Electrical
- ◆ Health
- ◆ Slope and Shaft Sinking Plans
- ◆ Inspection Guidelines
- ◆ Hazard Identification

Technical Coordinator: Ed Newcomb

Course Length: 2 days

Tuition: \$154.00

Dates: April 13-14, 2004
June 8-9, 2004

**TAILINGS DAM AND WASTE
PILE INSPECTION -
METAL/NONMETAL
[IM301M]**



This course will introduce the student to the general safety considerations for the design, construction, maintenance, and inspection of dams and waste piles.

Contents:

- ◆ Typical Geotechnical Investigations
- ◆ Foundation Analysis
- ◆ Breakthrough Potential Analysis
- ◆ Stability Analysis and Safety Factors
- ◆ Hydrologic and Hydraulic Considerations
- ◆ Construction Monitoring
- ◆ Identification of Deficiencies
- ◆ General Methods of Remediation
- ◆ Applicable Regulations

Technical Coordinator: Clifford F. Lindsay

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

TapRoot® SYSTEM ACCIDENT/INCIDENT INVESTIGATION TRAINING

[IV341G]

This course is for MSHA coal, metal/nonmetal, technical support, or other MSHA employees who are involved in mine accident/incident investigations. The TapRoot® System provides a methodology to lead an investigator through the techniques and steps used to perform an in-depth investigation of an incident's root causes. Training focuses on developing a flow diagram of the events and conditions leading up to the undesired incident, evaluating each condition, identifying causal factors, and evaluating each factor as to root cause. The course will include training on Systems Improvement's SnapCharT® and Root Cause Tree® software.

The SnapCharT® software is a graphic presentation of the sequence of events identified and discovered during the physical onsite investigation. A SnapCharT® helps the investigator organize the information gathered, identify the contributing factors that lead to the incident, and identify causal factors. In addition, it helps the investigator identify holes and inconsistencies in the information gathered during the investigation.

The Root Cause Tree® software takes over where a SnapCharT® stops. While the SnapCharT® looks at what happened and the contributing factors involved, the Root Cause Tree® looks at why it happened. The Root Cause Tree® provides the investigator with a comprehensive list of the root causes that should be considered for every incident.

Students should bring their laptop computers.

Contents:

- ◆ Equipment Failure Analysis including:
 - Design Failures
 - Defective Parts
 - Preventive/Predictive Maintenance

TapRoot[®] SYSTEM ACCIDENT/INCIDENT INVESTIGATION TRAINING *(continued)*

- ◆ Human Performance Difficulty Analysis including:
 - Procedures
 - Training
 - Quality Control
 - Communications
 - Management Systems
 - Human Engineering
 - Work Direction

Technical Coordinators: Kenneth M. Scott

Roy Milam

Scott Mandeville

Course Length: 3 days

Tuition: None

Dates: April 13-15, 2004

UNDERGROUND VENTILATION FOR METAL AND NONMETAL MINES

[VN303N]



This course is designed to assist metal/nonmetal miners in the recognition and evaluation of health hazards and effective ventilation methods to eliminate these hazards.

Contents:

- ◆ Airborne Contaminants
- ◆ Sampling and Detecting Devices
- ◆ Confined Spaces
- ◆ Hazard Controls
- ◆ Mine Maps
- ◆ Recognition of Areas That May Have Poor Air Quality
- ◆ Measuring Air Quantities
- ◆ Review of Ventilation Regulations

Technical Coordinators: Scott Mandeville
William D. McKinney

Course Length: 2 days

Tuition: \$154.00

Dates: *Scheduled upon request*

METAL/NONMETAL MINE SAFETY AND HEALTH INSPECTORS RETRAINING

[LP311M]

Metal and nonmetal mine safety and health inspectors are required to receive a minimum of two weeks of training every two years. This begins a new two-year training cycle for metal/nonmetal mine safety and health inspectors.

Listed below are the dates and subjects of the training sessions scheduled at the Academy.

SCHEDULE

December 2-11, 2003
January 6-15, 2004
March 30 - April 8, 2004

SUBJECTS

- ◆ Professionalism
- ◆ Electrical Hazards
- ◆ Root Cause Analysis
- ◆ Blasting Technology
- ◆ Shaft and Slope Sinking
- ◆ Citations and Order Writing
- ◆ Powered Haulage
- ◆ Accident Reduction Program
- ◆ Law, Regulation and Policy
- ◆ Health Procedures
- ◆ PowerPoint Presentations
- ◆ Laptop Troubleshooting
- ◆ Basic Rigging

METAL/NONMETAL ENTRY LEVEL MINE SAFETY AND HEALTH INSPECTORS TRAINING

The courses listed in this section are designed for entry level mine safety and health inspectors. However, they may be attended by other Federal, state, mining industry, and labor organization personnel.

Training dates are given with each module.

Need More Info? Contact:

Doris Fuller
Department of Instructional Services
National Mine Health and Safety Academy
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3234
FAX: (304) 256-3247
E-MAIL: fuller.doris@dol.gov

METAL/NONMETAL CURRICULUM (MODULES I-VII)

The following chart shows the required core courses for entry level mine safety and health inspectors.

Laptop computer and printer required for all modules.

Module I (4 weeks)

Orientation	Professionalism	Communications
Citations and Orders	Law Regulation and	Effective Citation
Writing/Notetaking	Policy/Math	Writing
Diversity	Introduction to	Introduction to
Standards of Conduct	Laptops	MSHA

Module II (4 weeks)

Inspection Procedures	Material Storage	Inspector's Portable
Surface Haulage	Interviewing	Applications for
Ground Control	Techniques	Laptops (IPAL)

Module III (3 weeks)

Conference Commu-	Accident Investigation	Citations and
nications/Simulated	Electricity	Orders Review
Inspection	Industrial Hygiene I	(S&S)

Module IV (3 weeks)

Industrial Hygiene	Drilling and Blasting	Employee Health
II	Industrial Ventilation	and Safety/
Citation and Orders	(in conjunction	Safety Talks I
Review [104(d)]	with IH)	

Module V (3 weeks)

Citations and Orders	Courtroom Procedures	IPAL Review
Review [107(a)/103(g)]	Gas Detecting Devices	Tailings
Training Require-	Safety Programs	Part 50
ments(Parts 48	TapRoot®	
and 46)		

Module VI (3 weeks)

Introduction to Spe-	Citations and Orders	Safety Talks II
cial Investigations	Review [104(g)]	Hazard Communica-
Underground Ventilation	Personal Protective	tions
Fire Protection	Equipment	Root Cause Analy-
Permissibility	Structural Safety	sis/Repeat Vio-
Compressed Air and	Unique Processes in	lation Reduction
Boilers	Mining	Program (RVRP)

Module VII (3 weeks)

Citations and Orders	Basic Toxicology	Citations and
Review [103(k)/	Hoisting/Cranes	Orders Review
103(f)]/General	Tech Support Briefing	[103(f)/103(g)]
Review	Part 50 Reporting	IPAL Review
Mine Rescue/Part 49	Requirements	Overall Review/
Slope and Shaft		Graduation
Inspection		

METAL/NONMETAL ENTRY LEVEL MINE SAFETY AND HEALTH INSPECTORS TRAINING

(Dates include travel days)

GROUP KK

Module VI	October 20 - November 7, 2003	(3 weeks)
Module VII	December 1 - December 19, 2003	(3 weeks)

GROUP LL

Module IV	October 20 - November 7, 2003	(3 weeks)
Module V	December 1 - December 19, 2003	(3 weeks)
Module VI	January 26 - February 13, 2004	(3 weeks)
Module VII	March 8 - March 26, 2004	(3 weeks)

GROUP MM*

Module I	September 8 - October 3, 2003	(4 weeks)
Module II	October 20 - November 7, 2003	(3 weeks)
Module III	December 1 - December 19, 2003	(3 weeks)
Module IV	January 26 - February 13, 2004	(3 weeks)
Module V	March 15 - April 9, 2004	(4 weeks)
Module VI	May 10 - May 28, 2004	(3 weeks)
Module VII	July 12 - July 30, 2004	(3 weeks)

GROUP NN*

Module I	October 27 - November 21, 2003	(4 weeks)
Module II	January 5 - January 30, 2004	(4 weeks)
Module III	February 23 - March 12, 2004	(3 weeks)
Module IV	April 5 - April 23, 2004	(3 weeks)
Module V	June 7 - June 25, 2004	(3 weeks)
Module VI	July 26 - August 13, 2004	(3 weeks)
Module VII	September 13 - October 1, 2004	(3 weeks)

GROUP OO

TO BE DETERMINED

****Tentative Schedules***

COAL INSPECTION COURSES

Journeyman Training

All journeyman coal mine safety and health inspectors will attend one week of training per year, or two weeks every other year. The training will be in a seminar format with subjects in various specialty areas. A list of dates and subjects can be found on page 61.

The additional courses described in this section are designed for journeyman coal mine safety and health inspectors and other Federal, state, mining industry, and labor organization personnel.

Course dates are given at the bottom of the course description.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course will then be scheduled.



If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

To Enroll Contact:

National Mine Health and Safety Academy
Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3252
FAX: (304) 256-3251

ADVANCED VENTILATION/ BLEEDER AND GOB VENTILATION SYSTEMS



[VN302C]

This advanced ventilation course is specifically designed for ventilation specialists, mine safety and health inspectors, supervisors, and mine managers. It will improve their understanding and working knowledge in ventilation systems for underground mining.

Contents:

- ◆ Ventilation Design
- ◆ Plan Approval
- ◆ Regulatory Compliance
- ◆ Maintenance
- ◆ Inspection/Examination
- ◆ Evaluation of Ventilation Systems
- ◆ De-gasification

Technical Coordinator: Scott Mandeville

Course Length: 2 days

Tuition: \$154.00

Dates: *Scheduled upon request*

BLASTING (SURFACE)

[EX316C]



This course discusses the characteristics and use of explosives and blasting agents. It is designed to teach blasting standards in accordance with Institute Makers of Explosives (IME) guidelines and the Code of Federal Regulations (30 CFR). The course is structured for MSHA coal mine safety and health inspectors and industry personnel.

Contents:

- ◆ Definitions
- ◆ Transportation and Storage of Explosives and Blasting Agents
- ◆ Detonation Units
- ◆ Misfires
- ◆ Electric and Nonelectric Blasting Operations
- ◆ Explosives Hazards and Accidents
- ◆ Safe Blasting Principles (Work Procedures and Blast Plans)
- ◆ Initiation Systems

Technical Coordinator: Wayne L. Lively

Course Length: 3 days

Tuition: \$231.00

Dates: October 21-23, 2003

COAL IMPOUNDMENT AND REFUSE PILE INSPECTION

[IM301C]

This course will introduce the student to the general safety considerations for the design, construction, maintenance, and inspection of dams and waste piles.

Contents:

- ◆ Typical Geotechnical Investigations
- ◆ Foundation Analysis
- ◆ Breakthrough Potential Analysis
- ◆ Stability Analysis and Safety Factors
- ◆ Hydrologic and Hydraulic Considerations
- ◆ Construction Monitoring
- ◆ Identification of Deficiencies
- ◆ General Methods of Remediation
- ◆ Applicable Regulations

Technical Coordinator: Clifford F. Lindsay

Course Length: 3 days

Tuition: \$231.00

Dates: March 9-11, 2004

***Additional courses can be
scheduled upon request***

ELECTRICAL SAFETY FOR COAL MINERS

[EL601C]

This course is designed to provide practical methods and techniques to identify electrical hazards and the appropriate enforcement actions to be taken. The course is for coal inspection personnel with limited or no electrical expertise.

Contents:

- ◆ Basic Electrical Theory
- ◆ Basic Circuitry
- ◆ Hazard Recognition
- ◆ Grounding
- ◆ Power Distribution Systems
- ◆ Regulations and Policies
- ◆ Personal Safety
- ◆ Citations and Orders
- ◆ Inspection of Electrical Equipment
- ◆ Permissibility

NOTE: *This course is not intended for Electrical Specialists. Courses for Electrical Specialists are offered under Technical Specialists Training on page 113.*

Technical Coordinator: Roy Milam

Course Length: 3 days

Tuition: \$231.00

Dates: September 14-16, 2004

EXPLOSION PREVENTION

[EX320C]



This course is designed to provide methods and techniques for identification of explosion hazards, prevention of such hazards, and appropriate actions to be taken when a hazard is detected. The course is structured for MSHA coal mine safety and health inspectors and industry personnel.

Contents:

- ◆ Permissibility
- ◆ Recognizing Potential Hazards
- ◆ Proper Rock Dusting Techniques and Sampling Procedures
- ◆ Recent Events
- ◆ Effective Workplace Examinations

Technical Coordinator: Scott Mandeville

Course Length: 2 days

Tuition: \$154.00

Dates: June 2-3, 2004

HAULAGE (SURFACE)

[HL301C]



Haulage accidents have been one of the highest categories of fatal accidents for several years at our Nation's surface mines. This course teaches the recognition of hazards that may exist in surface haulage, and is taught by former surface coal and metal/nonmetal mine safety and health inspectors.

Contents:

- ◆ Compliance Determination of 30 CFR Parts 77.400 and 77.1600
- ◆ Inspection Procedures for Surface Mining Equipment
- ◆ Use of Signs and Traffic Control on Mine Property
- ◆ Haul Road Design
- ◆ Brake Systems
- ◆ New Technology (video cameras)
- ◆ Rollover Protective Structures (ROPS)
- ◆ Falling Object Protective Structures (FOPS)
- ◆ Tire and Rim Safety
- ◆ Overview of Fatal Accidents

Technical Coordinator: John Tyler

Course Length: 3 days

Tuition: \$231.00

Dates: September 14-16, 2004

INDUSTRIAL HYGIENE

[IH315C]



This course will enable mine safety and health inspectors to recognize and effectively assess health hazards, other than dust and noise, in coal mines and related areas. Laboratory exercises will include sampling procedures and techniques for more common health hazards that may be encountered during inspections. Other health hazard sampling procedures and techniques as well as health effects - respiratory, dermatological, carcinogenic - will also be discussed.

Contents:

- ◆ Industrial Hygiene Terminology
- ◆ Toxicology
- ◆ Solvents
- ◆ Asbestos
- ◆ Radiation (Gamma, Ultraviolet)
- ◆ Sampling Methods
- ◆ Methods of Control
- ◆ Contaminants Detected at Mine Sites

Technical Coordinator: William D. McKinney

Course Length: 3 days

Tuition: \$231.00

Dates: August 31-September 2, 2004

INSPECTOR'S PORTABLE APPLICATIONS FOR LAPTOPS (IPAL) REVIEW – COAL

[CT307C]

The IPAL review course is designed for MSHA coal mine safety and health inspectors. The course reviews the latest version of the IPAL Program. The course also covers the fundamentals of the computer operating system, troubleshooting, and how to use the computer to reference resource material stored in the computer.

Contents:

- ◆ IPAL (Inspector's Portable Applications for Laptops)
- ◆ Reference Material (30 CFR, Mine Act, PPM, Policy Information Letters, and Program Information Bulletins)
- ◆ Basic Troubleshooting and Maintenance of the Laptop Computer and the IPAL Program
- ◆ Using Citrix Metaframe

Technical Coordinator: Betty Hogan

Course Length: 2 days

Tuition: None

Dates: *Scheduled upon request*

LONGWALL MINING AND INSPECTION PROCEDURES

[MS302C]



This course will introduce the student to longwall mining. It will also make the experienced coal mine inspectors more familiar with the trends and new technology in longwall mining. It will cover all aspects of longwall mining, including approved MSHA plans.

The first part of the course will cover all aspects of mining, including a review of all basic components of longwall mining systems and their functions. It will also cover longwall moves, degasification, and ground control for longwall faces.

The second part of the course will stress inspection procedures. It will cover all areas - from outby to the longwall face. This section has accompanying text and relates inspection procedures to the applicable standards in 30 CFR Parts 75 and 18.

Contents:

- ◆ History and Trends
- ◆ Parts of a Longwall (shearer, plow, panline, stage loader, drives, etc.)
- ◆ Shields (parts and controls)
- ◆ Strata Control (above the longwall)
- ◆ Hydraulics
- ◆ Longwall Moves
- ◆ Special Roof Control Products for Longwalls
- ◆ Ventilation (section, gob, bleeder, bleeder fans)
- ◆ Basic Longwall Electrical Systems
- ◆ CO Monitors
- ◆ Degasification
- ◆ Respirable Dust Control
- ◆ Inspection Procedures (Special Emphasis)
- ◆ Regulations

Technical Coordinator: Joseph Fama

Course Length: 3 days

Tuition: \$231.00

Dates: August 17-19, 2004



**MARSHALL UNIVERSITY MASTERS
OF SAFETY DEGREE (MINING
EMPHASIS)
[NEMU003]**

Courses will be offered pursuant to the Masters of Safety Degree (Mining Emphasis) program offered at the Academy through Marshall University.

Students must be admitted into the program **prior** to taking the courses. Application for Graduate Admission forms may be obtained by calling John Forte at (304) 256-3321.

College Chemistry 201, Math 130, and Physics 101 are prerequisites for admission to this program, as is a minimum undergraduate GPA of 2.5.

For information on spring, summer, and fall classes, contact John Rosiek at (304) 256-3211.

Technical Coordinators: John Rosiek
John Forte

Tuition: \$270 for each class for
MSHA employees
\$540 for non-MSHA
employees

Dates: Spring 2004
Summer 2004
Fall 2004

MINE ACCIDENT INVESTIGATION AND REPORT WRITING

[IV301G]

This course is for coal, metal/nonmetal, technical support, EPD, and other MSHA individuals involved in accident investigation. **Other interested individuals should contact the Technical Coordinator.**

The course reviews basic guidelines, procedures, and techniques used to investigate and report on accidents and other incidents involving health and safety in the mining industry.

Classroom activities and discussions cover reasons for accident investigations, the investigative process, data collection, accident reconstruction, proper analysis for corrective actions, and completion of investigative reports following relevant MSHA guidelines and policies. At the conclusion of the class, in a practical exercise, students will conduct a simulated accident investigation and prepare a report. **Students should bring their laptop computers.**

Contents:

- ◆ Overview of Accident Investigation
- ◆ Pre-Investigation Activities
- ◆ Dealing with Family Members
- ◆ Accident Reconstruction
- ◆ Photography/Sketching
- ◆ Interviewing Techniques
- ◆ Data Collection and Evaluation
- ◆ Developing Conclusions and Corrective Actions
- ◆ Report Writing
- ◆ TapRoot®

Technical Coordinators: Kenneth M. Scott
Roy Milam
Scott Mandeville

Course Length: 8 days

Tuition: None

Dates: January 6-15, 2004

March 16-25, 2004

July 13-22, 2004

September 14-23, 2004

NOISE HAZARDS, REGULATION, AND CONTROL

[IH321G]



This course provides the participant with information on the hazards associated with overexposure to noise. It thoroughly reviews 30 CFR Part 62 and appropriate monitoring and control methods. The course also discusses the elements of an effective hearing conservation program.

Contents:

- ◆ Characteristics of Noise
- ◆ Impact of Noise on Health
- ◆ Noise Monitoring
 - Sound Level Meters
 - Dosimeters
 - Octave Band Analysis
- ◆ Audiometric Examinations
- ◆ Noise Regulation - Compliance Discussion
 - Exposure levels
 - Monitoring
 - Hearing Conservation Programs
 - Training Requirements
- ◆ Control methods

Technical Coordinator: William D. McKinney

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

ROOF CONTROL FOR MINERS [RC601G]



This course will update the miner on regulations and the new safety products regarding roof control. Miners will be instructed in the principles and methods of roof/rib control. Subjects listed will be incorporated with safe mining practices to help reduce roof fall fatalities.

Contents:

- ◆ Mobile Roof Supports/Retreat Mining
- ◆ Cable Bolts
- ◆ New Roof Bolting Products
- ◆ Supplemental Supports (wood)
- ◆ Geology
- ◆ New ASTM Specs
- ◆ ATRS/Canopies
- ◆ Hazard Recognition
- ◆ Other Topics

Technical Coordinator: John Rosiek

Course Length: 1 day

Tuition: \$77.00

Dates: *Scheduled upon request*

ROOF CONTROL SEMINAR

[RC501C]

This seminar is designed for miners, company managers, engineers, trainers, roof bolter machine operators, and for any individual in coal mine roof safety. Federal and state enforcement personnel wishing to increase their knowledge in the latest developments in roof and rib control will also find this seminar very beneficial.

This seminar will update personnel on new products and methods related to roof stability. It will also include presentations by personnel from the Academy, Technical Support, MSHA headquarters, other government agencies, and industry. All subjects will incorporate safe mining practices which will help reduce roof fall injuries and fatalities. The seminar will discuss new roof control techniques, trends, and developments.

Contents:

- ◆ New Roof Bolting Products
- ◆ Supplemental Supports
- ◆ Roof Control Fatality Trends and Prevention
- ◆ Roof Control Machinery Updates

Technical Coordinators: Joseph Fama
John Rosiek

Course Length: 2 days

Tuition: None

Dates: June 2-3, 2004



SLOPE AND SHAFT SINKING SAFETY [RC310G]

This course will include a description of the most common conventional slope and shaft construction process, the hazards associated with slope and shaft work, and inspection procedures. It will also discuss the hazards associated with hoisting and cover the inspection procedures for wire ropes.

Contents:

- ◆ Slope and Shaft Construction Process
- ◆ Ventilation
- ◆ Ground Control
- ◆ Hoisting
- ◆ Electrical
- ◆ Health
- ◆ Slope and Shaft Sinking Plans
- ◆ Inspection Guidelines
- ◆ Hazard Identification

Technical Coordinator: Ed Newcomb

Course Length: 2 days

Tuition: \$154.00

Dates: April 13-14, 2004
June 8-9, 2004

SURFACE FACILITIES AND COAL PREPARATION

[PP601C]

This course is designed to familiarize the student with: equipment and processes used in coal preparation plants; hazards that might exist around preparation plants; and inspection requirements for such plants. This course has been expanded to include structural safety in an effort to eliminate surface structural failures in the mining industry.

Contents:

- ◆ Structural Safety
- ◆ Equipment Guarding
- ◆ Stockpile Safety
- ◆ Delivery Methods to the Plant
- ◆ Crushing, Sizing, and Washing Processes
- ◆ Dewatering and Drying
- ◆ Storage of Raw and Clean Coal
- ◆ Potential Hazards
- ◆ Preparation Plant Inspection

Technical Coordinators: Clifford F. Lindsay
John Tyler

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

TapRoot® SYSTEM ACCIDENT/INCIDENT INVESTIGATION TRAINING

[IV341G]

This course is for coal, metal/nonmetal, technical support, and other MSHA employees who are involved in mine accident/incident investigations. The TapRoot® System provides a methodology to lead an investigator through the techniques and steps used to perform an in-depth investigation of an incident's root causes. Training focuses on developing a flow diagram of the events and conditions leading up to the undesired incident, evaluating each condition, identifying causal factors, and evaluating each factor as to root cause. The course will include training on Systems Improvement's SnapCharT® and Root Cause Tree® software.

The SnapCharT® software is a graphic presentation of the sequence of events identified and discovered during the physical onsite investigation. A SnapCharT® helps the investigator organize the information gathered, identify the contributing factors that lead to the incident, and identify causal factors. In addition, it helps the investigator identify holes and inconsistencies in the information gathered during the investigation.

The Root Cause Tree® software takes over where a SnapCharT® stops. While the SnapCharT® looks at what happened and the contributing factors involved, the Root Cause Tree® looks at why it happened. The Root Cause Tree® provides the investigator with a comprehensive list of the root causes that should be considered for every incident.

Students should bring their laptop computers.

Contents:

- ◆ Equipment Failure Analysis including:
 - Design Failures
 - Defective Parts
 - Preventive/Predictive Maintenance

TapRoot[®] SYSTEM ACCIDENT/INCIDENT INVESTIGATION TRAINING *(continued)*

- ◆ Human Performance Difficulty Analysis including:
 - □ Procedures
 - □ Training
 - □ Quality Control
 - □ Communications
 - □ Management Systems
 - □ Human Engineering
 - □ Work Direction

Technical Coordinators: Kenneth M. Scott
Roy Milam
Scott Mandeville

Course Length: 3 days

Tuition: None

Dates: April 13-15, 2004

UNDERGROUND DIESEL EQUIPMENT/ VENTILATION

[VN321G]

This course provides the participants with techniques to conduct an evaluation of existing underground diesel mining equipment. Basic air sampling principles will be presented. The impact of diesel equipment on the mine ventilation system and the mine ventilation plan will be discussed. The associated health hazards with diesel equipment and diesel fuel will be examined.

Primary emphasis will focus on the Code of Federal Regulations (30 CFR) related to underground mining operations. The class will integrate technology with case studies and basic laboratory work.

Contents:

- ◆ Code of Federal Regulations Review
- ◆ Air Sampling Procedures
- ◆ Introduction to Basic Air Flow Measurement Techniques
- ◆ Equipment
- ◆ Health Hazards
- ◆ Proper Health Sampling Techniques
- ◆ Review of Diesel Technology

Technical Coordinator: Scott Mandeville

Course Length: 3 days

Tuition: \$231.00

Dates: April 13-15, 2004

August 24-26, 2004

UNDERGROUND HAULAGE, TRANSPORTATION, AND MACHINERY

[HL321C]



Accidents classified as Haulage or Machinery have continued to be one of the leading causes of fatalities in underground mining. These two categories are also the leading causes of nonfatal accidents in underground mining which result in lost work days.

This course for MSHA Coal Journeyman inspectors teaches recognition of some of the hazards associated with haulage equipment and other machinery found in underground coal mines and methods to eliminate them. The inspector will recognize haulage hazards and the appropriate enforcement action to take.

Contents:

- ◆ Recent Statistical Data
- ◆ Investigative Findings of Some Recent Accidents
- ◆ Difference Between Accidents Classified as Haulage and Those Classified as Machinery
- ◆ Regulations and Policy
- ◆ Safeguards
- ◆ Enforcement Action: Citations and Orders

Technical Coordinator: Roy Milam

Course Length: 2 days

Tuition: \$154.00

Dates: May 11-12, 2004

COAL MINE SAFETY AND HEALTH INSPECTORS RETRAINING

[LP311C]

MSHA underground and surface coal mine safety and health inspectors are required to receive a minimum of two weeks of training every two years. This begins a new two-year training cycle for journeyman coal mine safety and health inspectors.

Listed below are the dates of the training sessions scheduled at the Academy.

UNDERGROUND COAL MINE SAFETY AND HEALTH INSPECTORS

Schedule

May 18-27, 2004
June 8-17, 2004
July 20-29, 2004
October 19-28, 2004

SURFACE COAL MINE SAFETY AND HEALTH INSPECTORS

Schedule

October 26 - November 4, 2004

New subject areas will be announced later.

COAL ENTRY LEVEL MINE SAFETY AND HEALTH INSPECTORS TRAINING

The courses listed in this section are designed for entry level coal mine safety and health inspectors. However, they may be attended by other Federal, state, mining industry, and labor organization personnel.

Training dates are given with each module.

Need More Info? Contact:

Doris Fuller
Department of Instructional Services
National Mine Health and Safety Academy
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3234
FAX: (304) 256-3247
E-MAIL: fuller.doris@dol.gov

COAL CURRICULUM (MODULES I-VIII)

The following chart shows the required core courses for entry level mine safety and health inspectors.

Wellness training is scheduled for each module.
Laptop computer and printer required for all modules.

MODULE I (4 weeks)

Orientation	Effective Citation Writing	Citations and Orders
Standards of Conduct	Law, Regulation, &	Writing/Notetaking
Diversity	Policy/Math	Introduction to
Professionalism	Communications	Laptops

MODULE II (3 weeks)

Inspection Procedures	Surface Installations	Ground Control
Inspector's Portable	Combustible Materials	Structural Safety
Applications for	and Rockdusting	Gas Detecting
Laptops (IPAL)		Devices

MODULE III (3 weeks)

Citations and Orders	Roof Control I	Surface Loading
Review (S&S)	Respirable Dust	and Haulage

MODULE IV (3 weeks)

Citations and Orders	IPAL Review	Workplace Examinations
Review [104(d)]	Mine Maps/Ventilation I	Simulated Inspection
Fire Protection	Courtroom Procedures	Hazard Communications

MODULE V (3 weeks)

Blasting and Explosives	Roof Control II	Mine Electricity I
Citations and Orders	Petition for	Training Requirements/
Review [107(a)]	Modification	Part 48
Citations and Orders	Employee Health and	TapRoot ^â
Review [103(g)]	Safety	Underground Haulage

MODULE VI (3 weeks)

Mine Electricity II	Noise/Miscellaneous	Accident Investigation
Impoundments	Health	Ventilation II

MODULE VII (3 weeks)

Part 50 Reporting	Diesel Permissibility	Mine Rescue/Part 49
Requirements	Longwall High Voltage	Electrical Permissibility
Interviewing Techniques	Mine Wide Monitoring	Introduction to
Citations and Orders	Longwall	Special Investigations
Review [104(g)/Part 48]		

MODULE VIII (3 weeks)

Root Cause Analysis/	Technical Support	Employee Health and
Repeat Violation Reduc-	Field Trip	Safety
tion Program (RVRP)	Slope and Shaft	Conference Communi-
Citations and Orders	Inspection	cations/Trip to
Review [103(k) 103(f)/	Miscellaneous Safety	District Office
General Review	Standards	Overall Review/
Hoisting		Graduation

COAL ENTRY LEVEL MINE SAFETY AND HEALTH INSPECTORS TRAINING

(Dates include travel days)

GROUP 36

Module VII	October 20 - November 14, 2003	(4 weeks)
Module VIII	December 1 - December 19, 2003	(3 weeks)

GROUP 37

Module VIII	December 1 - December 19, 2003	(3 weeks)
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GROUP 38

Module VI	October 20 - November 7, 2003	(3 weeks)
Module VII	December 1 - December 19, 2003	(3 weeks)
Module VIII	January 19 - February 13, 2004	(4 weeks)

GROUP 39

Module IV	October 20 - November 7, 2003	(3 weeks)
Module V	December 1 - December 19, 2003	(3 weeks)
Module VI	January 26 - February 13, 2004	(3 weeks)
Module VII	March 1 - March 26, 2004	(4 weeks)
Module VIII	April 19 - May 7, 2004	(3 weeks)

GROUP 40

Module I	October 20 - November 14, 2003	(4 weeks)
Module II	December 1 - December 19, 2003	(3 weeks)
Module III	January 26 - February 13, 2004	(3 weeks)
Module IV	March 15 - April 9, 2004	(4 weeks)
Module V	May 10 - May 28, 2004	(3 weeks)
Module VI	June 14 - July 2, 2004	(3 weeks)
Module VII	August 2 - August 20, 2004	(3 weeks)
Module VIII	September 20 - October 8, 2004	(3 weeks)

GROUP 41

Module I	January 5 - January 30, 2004	(4 weeks)
Module II	February 23 - March 12, 2004	(3 weeks)
Module III	April 12 - April 30, 2004	(3 weeks)
Module IV	June 7 - July 2, 2004	(4 weeks)
Module V	July 26 - August 13, 2004	(3 weeks)
Module VI	September 13 - October 1, 2004	(3 weeks)
Module VII	October 18 - November 5, 2004	(3 weeks)
Module VIII	November 29 - December 17, 2004	(3 weeks)

GROUP 42

TO BE DETERMINED

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COMPUTER TRAINING SCHEDULE

Contents of each computer class are listed followed by a schedule by course dates. All persons attending, except employees of Federal, state, or local governments, will be charged a tuition fee of \$231.00 for a three-day class; \$154.00 for a two-day class; and \$77.00 for a one-day class.

Additional information may be obtained by contacting the Course Coordinators: Mac A. Carnes (304) 256-3398; Naomi A. Hughes (304) 256-3313; or Betty Hogan (304) 256-3235.

To Enroll Contact:

National Mine Health and Safety Academy
Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3252

FAX: (304) 256-3251

MICROSOFT® WORD 2002

[CT706G04]

Microsoft® Word 2002 is a word-processing program that is used to compose and update a wide range of business documents. It offers many desktop-publishing features that let you enhance the appearance of documents. Word also has the power and flexibility to produce professional documents quickly and easily.

Contents:

- ◆ Create a Document
- ◆ Edit and Format
- ◆ Present Information in Tables and Columns
- ◆ Work with Graphics/Charts
- ◆ Customize Word for the Way You Work
- ◆ Create Form Letters and Labels
- ◆ Create Forms
- ◆ Work with Footnotes and Bookmarks
- ◆ Work with Tables of Contents and Indexes

Technical Coordinators: Mac Carnes
Naomi Hughes

Course Length: 3 days

Tuition: \$231.00

Dates: December 2-4, 2003
February 10-12, 2004
March 2-4, 2004
May 25-27, 2004
June 22-24, 2004
August 24-26, 2004
September 21-23, 2004

MICROSOFT® WINDOWS 2000/ MICROSOFT® OUTLOOK 2002 [CT701G04]

Windows 2000 is an operating system that organizes files, runs programs, and coordinates work. This course will explore some of the basic features of the Windows desktop.

Contents:

- ◆ Use the Windows Desktop
- ◆ Customize Windows to the Way You Work
- ◆ Work with Files and Folders
- ◆ Print - How to Add a Network Printer
- ◆ Change Windows Settings
- ◆ Change Password
- ◆ Use the System Tools
- ◆ Use of Network Drives vs. Local Drives
- ◆ Log Onto the Network vs. Local Drives
- ◆ Virus Utilities
- ◆ Remote Access

Microsoft® Outlook 2002 is a desktop communications program that helps manage time and information more effectively and enables users to share information and collaborate with others more easily.

Contents:

- ◆ Mailbox Folder Creation
- ◆ Limitation on Mailbox Size
- ◆ How to Determine Mailbox Size
- ◆ Customize and Organize Email Messages
- ◆ Personal/Public Shared Folder
- ◆ Personal/Global Address Book
- ◆ Schedule and Manage Meetings
- ◆ Create and Organize Contacts/Tasks/Notes
- ◆ Customize Outlook
- ◆ Insert Hyperlinks to Files

- ◆ Remote Access
- ◆ Manage your Calendar
- ◆ Use the Journal
- ◆ Out of Office Assistant

Technical Coordinator: Naomi Hughes

Course Length: 2 days

Tuition: \$154.00

Dates: January 13-14, 2004
February 18-19, 2004
April 13-14, 2004
August 3-4, 2004

MICROSOFT® POWERPOINT 2002

[CT711G04]

Microsoft® PowerPoint 2002 is a presentation program that allows users to create overhead slides, speaker notes, audience handouts and outlines - all in a single presentation file. Power-Point offers powerful tools to help create and organize a presentation step by step. This class includes hands-on work in the Computer Laboratory, and development of a sample presentation.

Contents:

- ◆ Choose the Best Method to Start a Presentation
- ◆ Create a Presentation Using Suggested Content and a Design Template
- ◆ Browse Through a Presentation
- ◆ Enter and Edit Text in a Presentation
- ◆ View a Presentation
- ◆ Insert Slides from Other Presentations
- ◆ Rearrange Slides in a Presentation
- ◆ Create a Folder to Store a Presentation
- ◆ Change Text Alignment and Spacing
- ◆ Find and Replace Text and Fonts
- ◆ Correct Text While Typing
- ◆ Check Spelling and Presentation Styles
- ◆ Add a Header and Footer
- ◆ Choose the Right Print Settings
- ◆ Preview and Print a Presentation
- ◆ Enter and Print Speaker Notes

Technical Coordinators: Mac Carnes
Naomi Hughes

Course Length: 3 days

Tuition: \$231.00

Dates: December 16-18, 2003
February 24-26, 2004
June 22-24, 2004
September 14-16, 2004

MICROSOFT® EXCEL 2002 - BASIC

[CT721G04]

Excel 2002 is a spreadsheet program that can be used to organize, analyze and attractively present data, such as a budget or sales report. This course requires a prior knowledge of computers. Classroom activities include hands-on work in the Computer Laboratory.

Contents:

- ◆ Excel Basics
- ◆ Entering and Editing Data
- ◆ Modifying a Worksheet
- ◆ Using Functions
- ◆ Formatting Worksheets
- ◆ Printing
- ◆ Creating Charts
- ◆ Using the Help Feature

Technical Coordinators: Mac Carnes
Naomi Hughes

Course Length: 3 days

Tuition: \$231.00

Dates: October 28-30, 2003
February 10-12, 2004
June 15-17, 2004

MICROSOFT® EXCEL 2002 – INTERMEDIATE [CT722G04]

Excel 2002 is a spreadsheet program that can be used to organize, analyze and attractively present data, such as a budget or sales report. This course requires a prior knowledge of computers and the Basic Excel course. Activities include hands-on work in the Computer Laboratory.

Contents:

- ◆ Working With Large Worksheets
- ◆ Working With Multiple Worksheets and Workbooks
- ◆ Advanced Charting
- ◆ Advanced Formatting
- ◆ Using Templates
- ◆ Additional Functions
- ◆ Protecting Parts of a Worksheet

Technical Coordinators: Mac Carnes
Naomi Hughes

Course Length: 3 days

Tuition: \$231.00

Dates: January 13-15, 2004
April 20-22, 2004
August 17-19, 2004

MICROSOFT® ACCESS 2002 – BASIC

[CT731G04]

Access 2002 is a database program that allows users to store and manage large collections of information. Access provides all the tools needed to create an efficient and effective database. This course requires a prior knowledge of computers. Activities include hands-on work in the Computer Laboratory.

Contents:

- ◆ Access Basics
- ◆ Creating Databases
- ◆ Working With Fields and Records
- ◆ Querying Tables
- ◆ Creating and Using Forms
- ◆ Create, Modify, and Print Reports
- ◆ Import and Export Database Objects

Technical Coordinators: Mac Carnes
Naomi Hughes

Course Length: 3 days

Tuition: \$231.00

Dates: October 21-23, 2003
February 3-5, 2004
May 25-27, 2004

MICROSOFT® ACCESS 2002 – INTERMEDIATE [CT732G04]

Access 2002 is a database program that allows users to store and manage large collections of information. Access provides all the tools needed to create an efficient and effective database. This course requires a prior knowledge of computers. Activities include hands-on work in the Computer Laboratory.

Contents:

- ◆ Creating Relational Databases
- ◆ Working With Related Tables
- ◆ Input Masks
- ◆ Advanced Query Features
- ◆ Creating Advanced Queries
- ◆ Advanced Form Design
- ◆ Advanced Report Features
- ◆ Creating Charts in Forms and Reports

Technical Coordinators: Mac Carnes
Naomi Hughes

Course Length: 3 days

Tuition: \$231.00

Dates: January 6-8, 2004
March 16-18, 2004
June 8-10, 2004

MICROSOFT® ACCESS 2002 – ADVANCED

[CT733G04]

Access 2002 is a database program that allows users to store and manage large collections of information. Access provides all the tools needed to create an efficient and effective database. This course is for experienced database users and requires a prior knowledge of Microsoft® Access. Activities include hands-on work in the Computer Laboratory.

Contents:

- ◆ Create and Use an Advanced Form
- ◆ Create and Use Macros
- ◆ Exploring Access SQL
- ◆ Managing and Protecting Databases

Technical Coordinators: Mac Carnes
Naomi Hughes

Course Length: 3 days

Tuition: \$231.00

Dates: January 27-29, 2004
March 23-25, 2004
July 27-29, 2004

CERTIFICATION AND QUALIFICATION COURSES

[CT706G]

The courses in this section are available to MSHA and industry personnel. Upon successful completion of any of these courses, participants will receive the required MSHA certification for the particular area covered.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course will then be scheduled.

QUESTIONS?

If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

To Enroll Contact:

National Mine Health and Safety Academy
Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3252

FAX: (304) 256-3251

ANNUAL RETRAINING FOR IMPOUNDMENT QUALIFICATION [IM602C]

This course provides the annual retraining requirements for qualified impoundment mine safety and health inspectors. Impoundment mine safety and health inspectors are required to receive annual retraining in accordance with the requirements specified in the Code of Federal Regulations [30 CFR 77.107-1(b)].

Contents:

- ◆ Reviews of Proper Inspection Procedures
- ◆ Signs of Impoundment Distress
- ◆ Instrumentation Monitoring
- ◆ Construction Monitoring
- ◆ Emergency Action Planning
- ◆ Foundation Analysis
- ◆ Geotechnical Investigations
- ◆ Breakthrough Potential Analysis

Technical Coordinator: Clifford F. Lindsay

Course Length: 4 hours

Tuition: \$44.00

Dates: December 17, 2003
March 3, 2004
June 16, 2004
August 18, 2004

QUALIFICATION FOR IMPOUNDMENT INSPECTION [IM601C]



This course provides the initial training for personnel who are required to inspect impoundments. Successful completion of this course qualifies the participant to inspect impoundments as required by the Code of Federal Regulations [30 CFR 77.216-3(g)].

Contents:

Introductory training on:

- ◆ Proper Inspection Procedures
- ◆ Recognizing Deficiencies and Signs of Distress
- ◆ Failure Modes
- ◆ Foundation Analysis
- ◆ Geotechnical Investigation
- ◆ Breakthrough Potential Analysis
- ◆ Common Instrumentation
- ◆ Facility Configurations
- ◆ Field Hazard Classifications
- ◆ Reporting Requirements
- ◆ Inspection Forms

Technical Coordinator: Clifford F. Lindsay

Course Length: 8 hours

Tuition: \$77.00

Dates: November 13, 2003
February 19, 2004
May 5, 2004
July 14, 2004

RESPIRABLE COAL MINE DUST SAMPLER CALIBRATION/MAINTENANCE CERTIFICATION [IH602C]

This course provides the initial training for personnel who are required to calibrate and maintain coal mine dust sampling equipment.

Successful completion of this course certifies the participant to calibrate and maintain respirable coal mine dust sampler units under the current Code of Federal Regulations (30 CFR Parts 70/71/90).

Contents:

- ◆ Properties of the Approved Sampling Unit
- ◆ Responsibilities of the Certified Person for Maintenance and Calibration

Hands-On Instruction:

- ◆ Pump Calibration Procedures
- ◆ Maintenance Requirements
- ◆ Sampling Unit Inspection
- ◆ Pre-Shift Checks of Approved Sampling Unit

Technical Coordinator: William D. McKinney

Course Length: 8 hours

Tuition: \$77.00

Dates: September 22, 2004

RESPIRABLE COAL MINE DUST SAMPLING CERTIFICATION

[IH601C]

This course provides the initial training for personnel who are required to collect coal mine dust samples.

Successful completion of this course certifies the participant to collect and submit respirable coal mine dust samples under the current Code of Federal Regulations (30 CFR Parts 70/71/90).

Contents:

Instruction in the Regulations Governing the Coal Mine Operator's Respirable Dust Sampling Program including:

- ◆ Nature of Respirable Dust Hazards
- ◆ Responsibilities of the Certified Sampler
- ◆ Respirable Dust Sampling Procedures
- ◆ Approved Sampler Units
- ◆ On-Shift Parameter Checks

Hands-on Instructions for Sampling Unit:

- ◆ Assembly
- ◆ Inspection
- ◆ Use

Technical Coordinator: William D. McKinney

Course Length: 8 hours

Tuition: \$77.00

Dates: September 21, 2004

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GENERAL COURSES FOR MSHA AND THE MINING INDUSTRY

The Academy courses described in this section are available to MSHA and industry personnel.



Courses marked by this icon may be held at your worksite. If your company or organization would like any of these courses presented onsite, contact Doris Fuller at (304) 256-3234. The course will then be scheduled.

QUESTIONS?

If you need more information about contents of a course, contact the technical coordinator for that course at (304) 256-3100 or Doris Fuller at (304) 256-3234.

To Enroll Contact:

National Mine Health and Safety Academy
Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3252

FAX: (304) 256-3251

ACCIDENT PREVENTION TECHNIQUES

[SF601G]



This course is designed for safety managers/directors, mine managers, or anyone in the mining industry involved in safety management. Several proven accident reduction techniques are covered during the three-day class.

The course begins with a discussion on the principle of multiple causation and the importance of identifying the significant contributing factors in most mining accidents. Accidents/incidents are divided into the three levels of causation with examples of each level discussed. Discussions focus on the indirect level of causation through a technique of identifying performance problems as either skill or motivational. Unsafe conditions and unsafe work practices are addressed through job safety analysis and job observation. Stress, safety communications, and effective safety talks will be covered.

The class ends with a health and safety survey which can identify the strengths and weaknesses of a company's health and safety program.

Contents:

- ◆ Accident/Incident Analysis
- ◆ Analyzing Performance Problems
- ◆ Safety Communications/Promotion
- ◆ Developing Effective Safety Talks
- ◆ Managing Stress
- ◆ Job Safety Analysis
- ◆ Job Observation
- ◆ Accident Investigation
- ◆ Mine Safety Program Rating Procedures

Technical Coordinator: Kenneth M. Scott

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

**ADVANCED VENTILATION/
BLEEDER AND GOB
VENTILATION SYSTEMS
[VN302C]**



This advanced ventilation course is specifically designed for ventilation specialists, mine safety and health inspectors, supervisors, and mine managers. It will improve their understanding and working knowledge in ventilation systems for underground mining.

Contents:

- ◆ Ventilation Design
- ◆ Plan Approval
- ◆ Regulatory Compliance
- ◆ Maintenance
- ◆ Inspection/Examination
- ◆ Evaluation of Ventilation Systems
- ◆ De-gasification

Technical Coordinator: Scott Mandeville

Course Length: 2 days

Tuition: \$154.00

Dates: *Scheduled upon request*

ELECTRICAL SAFETY FOR COAL MINERS

[EL601C]

This course is designed to provide practical methods and techniques to identify electrical hazards and the appropriate enforcement actions to take. The course is for coal industry personnel with limited or no electrical expertise.

Contents:

- ◆ Basic Electrical Theory
- ◆ Basic Circuitry
- ◆ Hazard Recognition
- ◆ Grounding
- ◆ Power Distribution Systems
- ◆ Regulations and Policies
- ◆ Personal Safety
- ◆ Inspection of Electrical Equipment
- ◆ Permissibility

NOTE: *This course is not intended for Electrical Specialists. Courses for Electrical Specialists are offered under Technical Specialists Training on page 113.*

Technical Coordinator: Roy Milam

Course Length: 3 days

Tuition: \$231.00

Dates: September 14-16, 2004

ELECTRICAL SAFETY FOR METAL/NONMETAL MINERS

[EL601M]

This course is designed to provide practical methods and techniques to identify electrical hazards and the appropriate enforcement actions to take. This course is for metal/nonmetal industry personnel with limited or no electrical expertise.

Contents:

- ◆ Grounding
- ◆ Power Distribution Systems
- ◆ Inspection of Electrical Equipment
- ◆ Regulations and Policies
- ◆ Hazard Recognition
- ◆ Personal Safety

NOTE: *This course is not intended for Electrical Specialists. Courses for Electrical Specialists are offered under Technical Specialists Training on page 113.*

Technical Coordinator: Roy Milam

Course Length: 2 days

Tuition: \$154.00

Dates: July 27-28, 2004

September 28-29, 2004

***Additional courses can be
scheduled upon request***

HAZARD COMMUNICATION (HAZCOM)

[IH616G]

This course is designed to provide operators with information to develop an effective HazCom program. It will review the requirements of 30 CFR Part 47, including identification of chemicals at the mine site, determining which chemicals are hazardous, establishing a HazCom Program, and informing miners about chemical hazards and appropriate protection measures.

Contents:

- ◆ Purpose and Scope of the HazCom Standard
- ◆ Operators and Chemicals Covered
- ◆ Identification of Hazardous Chemicals
- ◆ Requirements for a HazCom Program
- ◆ Container Labels and Other Forms of Warning
- ◆ Material Safety Data Sheet (MSDS) Requirements
- ◆ HazCom Training Requirements
- ◆ Availability of HazCom Information
- ◆ Trade Secret Provisions
- ◆ Exemptions

Technical Coordinators: Tom Bonifacio
William D. McKinney
John Tyler

Course Length: 1 day

Tuition: \$77.00

Dates: *Scheduled upon request*

HOISTS AND ELEVATORS

[HS603C]



This course provides instruction to the student in the basic parts of mine personnel hoists and elevators. It includes discussion of drums, sheaves, cages, but mainly concentrates on wire ropes and terminations. The student will learn basic wire rope and termination technology and how to use this knowledge to enforce removal criteria according to the Code of Federal Regulations (30 CFR 75.1400 or 56.19000). The class will also touch on the American Society of Mechanical Engineers (ASME) A17.1 and A17.2 Standards which apply to elevators. The student will be taught how to conduct an adequate inspection for personnel hoists and elevators. There are exercises on hazard recognition and how to write the appropriate citations. This course is for MSHA coal and metal/nonmetal mine safety and health inspectors and industry personnel.

Contents:

- ◆ Wire Rope Technology
- ◆ Terminations and Attachments
- ◆ Removal Criteria According to 30 CFR
- ◆ How to Apply ASME A17.1 & A17.2
- ◆ Hazard Recognition
- ◆ Inspection Procedure
- ◆ Citation and Order Writing

Technical Coordinator: Joseph Fama

Course Length: 3 days

Tuition: \$231.00

Dates: September 28-30, 2004

**INDUSTRIAL HYGIENE:
SAMPLING FOR RESPIRABLE
SILICA DUST AND NOISE
[IH621M]**



(Offered on site)

This class, developed in cooperation with the National Stone, Sand and Gravel Association, **is to be scheduled at your worksite**. It involves two days of classroom work and a full day of on-site sampling for silica and noise. It prepares miners and mine operators to conduct ongoing sampling. Results of noise sampling are available immediately; dust samples require analysis in the laboratory, and the cost of analysis is picked up by the mine operator.

A minimum of 10 students is required; the maximum class size is 15 students.

Contents:

- ◆ Hazards of Silica and Noise
- ◆ Introduction to Industrial Hygiene
- ◆ Sampling Equipment and Techniques Laboratory
- ◆ Record Keeping
- ◆ Calculations
- ◆ Controls

Technical Coordinator: William D. McKinney

Tuition: \$250.00 per student

Dates: *Limited availability; to be arranged with individual operators*

INSTRUCTOR TRAINING WORKSHOP (PART 48)

[GS641G]

This course is intended to improve the instructional skills, abilities, and knowledge of mine trainers. Participants will be required to select, develop, and present a 15-minute training segment on a health or safety topic in 30 CFR Part 48. The presentation will be videotaped for playback and individual review.

Approval as a Part 48 instructor is a two-part process. (1) You must demonstrate that you have knowledge of the subjects that you will be teaching. This is generally accomplished by submitting a resume to the local MSHA District showing your mining experience and education. (2) You must demonstrate that you have the ability to teach. Successful completion of this course will enable you to meet this requirement.

The course is offered as a three (3) or four (4) day program. An optional MSHA First Aid class is offered the first day.

Contents:

- ◆ Principles of Adult Instruction
- ◆ Developing Objectives
- ◆ Developing Criterion Test Items
- ◆ Outlining the Training Content
- ◆ Determining the Instructional Methods
- ◆ Developing and Using Training Aids
- ◆ Developing a Lesson Plan
- ◆ Using Facilitation Skills
- ◆ Part 48 Requirements
- ◆ MSHA First Aid Program

Technical Coordinator: Kenneth M. Scott

Course Length: 3 days (4 days with
first aid)

Tuition: \$231.00 (3 days)
\$308.00 (4 days)

Dates: November 17-20, 2003
May 10-13, 2004
August 2-5, 2004

(All dates include one day First Aid Instructor Training)

INTERMEDIATE TOXICOLOGY

[IH606G]



This course will provide coal and metal/nonmetal health specialists with a review of the uptake, distribution, metabolism, and elimination of industrial and environmental chemicals. Dose- and time-response relationships will be discussed. Toxic effects of metals, particulates, solvents, and other chemicals found in the mine environment will be examined.

Contents:

- ◆ Introduction to Fundamental Concepts of Toxicology
- ◆ Review of Terminology Used in Toxicology
- ◆ Comparison of Inhalation, Ingestion, and Dermal Exposures
- ◆ Definition of Endpoints of Toxicity
- ◆ Summary of Acute Versus Chronic Toxicity
- ◆ Discussion of Toxicity Data Used to Develop Exposure Limits for Humans

Instructor: Michelle Schaper

Technical Coordinator: William D. McKinney

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

INTRODUCTION TO MINING [MS701G]



The mining industry fulfills the important function of providing society's raw materials. Increasingly, mining has become more complex, due to rapid technological changes and comprehensive regulations. This complexity coupled with the industry's rich and traditional use of unique terminology can make understanding mining difficult for persons unfamiliar with it. This course introduces participants to the broad scope of mining, and is for those with little or no mining knowledge. It will provide participants with a working understanding of the various aspects of the industry.

Contents:

- ◆ Mining Terminology
- ◆ Mineral Exploration and Geology
- ◆ Mineral Economics
- ◆ Description of the Different Mining Methods
- ◆ Coal Preparation and Mineral Processing
- ◆ Health and Safety Regulations including:
 - □ Ground/Roof Control
 - □ Ventilation and Dust Control
 - □ Haulage and Hoisting
 - □ Personal Protective Equipment
 - □ Mapping
 - □ Mine Examinations
 - □ Electricity
 - □ Explosives
 - □ Industrial Hygiene

Technical Coordinator: Jimmy L. Shumate

Course Length: 3 days

Tuition: \$231.00

Dates: September 28-30, 2004



**MARSHALL UNIVERSITY MASTERS
OF SAFETY DEGREE (MINING
EMPHASIS)
[NEMU003]**

Courses will be offered pursuant to the Masters of Safety Degree (Mining Emphasis) program offered at the Academy through Marshall University.

Students must be admitted into the program **prior** to taking the courses. Application for Graduate Admission forms may be obtained by calling John Forte at (304) 256-3321.

College Chemistry 201, Math 130, and Physics 101 are prerequisites for admission to this program, as is a minimum undergraduate GPA of 2.5.

For information on spring, summer, and fall classes, contact John Rosiek at (304) 256-3211.

Technical Coordinators: John Rosiek
John Forte

Tuition: \$270 for each class for
MSHA employees
\$540 for non-MSHA
employees

Dates: Spring 2004
Summer 2004
Fall 2004

MINE ACCIDENT INVESTIGATION TECHNIQUES

[IV601G]



This course is directed towards safety directors, managers, foremen, union safety committee persons, or mining industry (metal/nonmetal or coal) individuals involved in accident investigation. Course content reviews basic guidelines, procedures, and techniques for the preparation and handling of investigations of accidents and other incidents involving health and safety in the mining industry.

Classroom activities and discussions cover reasons for accident investigations, the investigative process, data collection, accident reconstruction, and proper analysis for corrective actions. Hands-on exercises are stressed along with class participation.

Contents:

- ◆ Overview of Accident Investigation
- ◆ Pre-Investigation Activities
- ◆ Accident Reconstruction
- ◆ Photography/Sketching
- ◆ Interviewing Techniques
- ◆ Data Collection and Evaluation
- ◆ Developing Conclusions and Recommendations

Technical Coordinator: Kenneth M. Scott

Course Length: 3 days

Tuition: \$231.00

Dates: May 18-20, 2004

MINE CONSTRUCTION, MAINTENANCE, AND REPAIRS SAFETY

[MS615G]

This course is designed for the mining construction industry, related support groups, mining regulatory agencies, and others that are involved with the planning, design, and application of mine construction and maintenance activities.

Contents:

- ◆ Accident Analysis and Prevention
- ◆ Effective Work Area Examinations
- ◆ Mobile Equipment Examinations
- ◆ Fall Prevention
- ◆ Basic Crane Safety
- ◆ Material Storage and Handling
- ◆ Conveyor Belt Safety
- ◆ Confined Space Safety
- ◆ Wire Ropes and Slings
- ◆ Surface Installations

Technical Coordinator: Tom Bonifacio

Course Length: 2 days

Tuition: \$154.00

Dates: August 17-18, 2004

September 28-29, 2004

**MINE ELEVATOR INSPECTION
PROGRAM TRAINING – MODULE I
[HS606G]**



This training module covers the inspection of mine elevators and the impact of the mine environment on critical elevator components. It will enable the student to perform basic mine elevator inspections, focusing on critical safety concerns, including those identified in recent mine elevator accidents. The material will be correlated to the applicable sections of ASME A17. Many visuals and actual elevator hardware will be used throughout the program.

This module is a stand-alone program for elevators used in harsh environments. It also can be used as the first in a series of modules designed to prepare the student for taking the Qualified Elevator Inspector (QEI) certification examination.

NOTE: Students should bring the latest version of elevator codes ASME A17.1 & A17.2.1 with them, although they are not mandatory.

Technical Coordinator: Roy Milam

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

MINE RESCUE TRAINING

[ME601G]

This course is designed for mine rescue teams and mining industry personnel that may be associated with responding to mine emergencies, such as mine fires, explosions, and inundations. The major part of the training is accomplished by participation in exercises in the Mine Simulation Laboratory.

Contents:

- ◆ Mine Emergency Response Overview
- ◆ Mine Emergency Operations
- ◆ Mine Emergency Personnel
- ◆ Mine Emergency Communications and Decision Making
- ◆ Mine Emergency Practices and Procedures
- ◆ Mine Emergency Rescue and Recovery Strategy
- ◆ Tactical Implementation of Operations

Technical Coordinator: David Friley

Course Length: 1 day

Tuition: \$77.00*

Dates: *Scheduled upon request*

* *Tuition may be waived for mine rescue team members participating in team training activities, up to ten (10) days per calendar year.*

NOISE HAZARDS, REGULATION, AND CONTROL [IH321G]

This course provides the participant with information on the hazards associated with overexposure to noise. It thoroughly reviews 30 CFR Part 62 and appropriate monitoring and control methods. The course also discusses the elements of an effective hearing conservation program.

Contents:

- ◆ Characteristics of Noise
- ◆ Impact of Noise on Health
- ◆ Noise Monitoring
 - Sound Level Meters
 - Dosimeters
 - Octave Band Analysis
- ◆ Audiometric Examinations
- ◆ Noise Regulation - Compliance Discussion
 - Exposure Levels
 - Monitoring
 - Hearing Conservation Programs
 - Training Requirements
- ◆ Control Methods

Technical Coordinator: William D. McKinney

Course Length: 3 days

Tuition: \$231.00

Dates: January 27-29, 2004

RESPIRABLE DUST AND SILICA SAMPLING AND CONTROL

[IH311C]



This course includes ventilation plan case studies and intensive hands-on exercises focusing on dust control plan evaluation and quantitative measurement and analysis of control parameters.

Contents:

- ◆ Respirable Dust and Silica: Health Hazards and Sources
- ◆ Compliance with 30 CFR and MSHA Policy
- ◆ Noncompliance - A History of Violations
- ◆ Respirable Dust Sampling Equipment
- ◆ Conducting Respirable Dust Inspections: Operator and MSHA Sampling
- ◆ Documentation: The Importance of Good Records
- ◆ An Introduction to Dust Control
- ◆ Face Ventilation Systems and Equipment and Ventilation Measurements
- ◆ Water Systems: Measuring Flows and Pressures
- ◆ Respiratory Protection Programs and ANSI Standards
- ◆ Operator Programs: Dust and Ventilation Control
- ◆ Field Sampling Day(s)
- ◆ Evaluation of Control Programs

Technical Coordinator: William D. McKinney

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*



ROOT CAUSE ANALYSIS WORKSHOP [SF602G]



The purpose of the Root Cause Analysis Workshop is to begin action toward reducing violations, accidents, and incidents at a mining operation. Root Cause Analysis recognizes that violations, accidents, and incidents are an indicator of a breakdown which allows these occurrences to happen. This method will result in a professional approach in accident prevention, and can act as a training mechanism for workers and mine operators.

Class activities will use citations and orders issued during an inspection and the incidents and/or accidents that a mine has encountered to initiate a process of analysis that will start an inquiry into questions such as:

- ◆ What is causing these violations, accidents, and incidents to occur at the mining operation?
- ◆ Why does the mine have the same type of violations at each inspection?
- ◆ Why does the mine continue to have the same kind of accidents and incidents?
- ◆ What can be done to eliminate the violations, accidents, and incidents at this mine?

Technical Coordinator: John Forte

Course Length: 1 day

Tuition: \$77.00

Dates: February 19, 2004
June 1, 2004

SURFACE FACILITIES AND COAL PREPARATION

[PP601C]

This course is designed to familiarize the student with: equipment and processes used in coal preparation plants; hazards that might exist around preparation plants; and inspection requirements for such plants. This course has been expanded to include structural safety in an effort to eliminate surface structural failures in the mining industry.

Contents:

- ◆ Structural Safety
- ◆ Equipment Guarding
- ◆ Stockpile Safety
- ◆ Delivery Methods to the Plant
- ◆ Crushing, Sizing, and Washing Processes
- ◆ Dewatering and Drying
- ◆ Storage of Raw and Clean Coal
- ◆ Potential Hazards
- ◆ Preparation Plant Inspection

Technical Coordinators: Clifford F. Lindsay
John Tyler

Course Length: 3 days

Tuition: \$231.00

Dates: *Scheduled upon request*

UNDERGROUND HAULAGE, TRANSPORTATION, AND MACHINERY

[HL606C]



Accidents classified as Haulage or Machinery continue to be one of the leading causes of fatalities in underground mining. These two categories are also the leading causes of nonfatal accidents in underground mining which result in lost work days.

This course teaches recognition of some of the hazards associated with haulage equipment and other machinery found in underground coal mines and methods to eliminate them.

Contents:

- ◆ Recent Statistical Data
- ◆ Investigative Findings of Some Recent Accidents
- ◆ Difference Between Accidents Classified as Haulage and Those Classified as Machinery
- ◆ Regulations and Policy
- ◆ Safeguards

Technical Coordinator: Roy Milam

Course Length: 2 days

Tuition: \$154.00

Dates: March 2-3, 2004

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SEMINARS/WORKSHOPS FOR MSHA AND THE MINING INDUSTRY

The Academy Seminars/Workshops described in this section are available to MSHA and industry personnel.

QUESTIONS?

If you need more information about contents of a seminar/ workshop, contact the technical coordinator for that seminar/ workshop at (304) 256-3100 or Doris Fuller at (304) 256-3234.

To Enroll Contact:

National Mine Health and Safety Academy
Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

TELEPHONE: (304) 256-3252

FAX: (304) 256-3251

ACCIDENT INVESTIGATION RETRAINING SEMINAR

[IV401G04]

This seminar is designed to provide continuing education training to MSHA Accident Investigators on a bi-annual basis. Current accident investigators in Coal, Metal/Nonmetal, Technical Support, and EPD are required to attend one of the two journeyman level retraining seminars.

A prerequisite for the seminar is the two-week Basic Accident Investigation and Report Writing course offered by the Academy. The first of the bi-annual seminars was conducted in February 2003. Those investigators who were unable to attend in 2003 should plan to attend the second seminar in 2004. Space is limited to half the investigators in FY 2004 with the other half in FY 2005. **Students should bring their laptop computers.**

Some of the projected topics for the seminar are:

- ◆ Advanced Interviewing Techniques
- ◆ Using Tape Recorders During Interviewing
- ◆ Legal Issues Involving MSHA Investigations
- ◆ Advanced Evidence Collection
- ◆ Critical Incident Stress
- ◆ Report Writing
- ◆ Scene Preservation and Sketching
- ◆ Human Error in Accident Investigation

Technical Coordinator: Kenneth M. Scott

Course Length: 7 days

Tuition: None

Dates: February 18-26, 2004

MINE BLASTING SAFETY AND APPLICATION SEMINAR

[EX521G04]

This seminar is designed for company managers, blasting engineers, blasters, state and Federal mine safety and health inspectors (coal and metal/nonmetal), and others involved with the planning, design, and the use of explosives in the mining industry. The most recent blasting techniques, trends, and developments will be discussed, as well as the ability to share ideas in small group sessions.

Contents:

- ◆ Vibration Analysis/Seismographs/Efficient Blasting Techniques
- ◆ Storage of Explosives
- ◆ Handling and Use of Explosives
- ◆ Silica Dust and Toxic Gas Hazards in Blasting
- ◆ Blasting Agents and Emulsions

Technical Coordinator: Wayne L. Lively

Course Length: 2½ days

Tuition: None

Dates: January 21-23, 2004

MINE CONSTRUCTION, MAINTENANCE, AND REPAIRS SAFETY WORKSHOP

[MS501G04]

This workshop is designed for the mining construction industry, related support groups, mining regulatory agencies, and others that are involved with the planning, design, and application of mine construction and maintenance activities.

Contents:

- ◆ Blasting in Construction
- ◆ Fall Protection Systems
- ◆ Electrical Hazards Affecting Construction
- ◆ Equipment Practices and Workplace Examinations
- ◆ Crane Safety
- ◆ Working in Confined Spaces
- ◆ Structure Demolition
- ◆ Retrofit Noise Controls
- ◆ Wire Ropes and Slings Used in Construction
- ◆ Accident Review
- ◆ How Contractors are Affected by 30 CFR Parts 46 and 48
- ◆ Welding Safety
- ◆ Compliance Guide for 30 CFR, Part 47 Hazard Communication (HazCom)
- ◆ Wire Rope Testing

Technical Coordinator: Tom Bonifacio

Course Length: 3 days

Tuition: None

Dates: April 13-15, 2004

ROOF CONTROL SEMINAR

[RC501C04]

This seminar is designed for miners, company managers, engineers, trainers, roof bolter machine operators, and for any individual involved in coal mine roof safety. Federal and state enforcement personnel wishing to increase their knowledge in the latest developments in roof and rib control will also find this seminar very beneficial.

This seminar will update personnel on new products and methods related to roof stability. It will also include presentations by personnel from the Academy, Technical Support, MSHA headquarters, other government agencies, and industry. All subjects will incorporate safe mining practices which will help reduce roof fall injuries and fatalities. The seminar will discuss new roof control techniques, trends, and developments.

Contents:

- ◆ New Roof Bolting Products
- ◆ Supplemental Supports
- ◆ Roof Control Fatality Trends and Prevention
- ◆ Roof Control Machinery Updates

Technical Coordinators: Joseph Fama
John Rosiek

Course Length: 2 days

Tuition: None

Dates: June 2-3, 2004

SURFACE HAULAGE SAFETY SEMINAR

[HL501G04]

This seminar brings together representatives of the mining industry and others that are involved with the planning, design, and use of surface mine haulage equipment and/or systems. The seminar will provide an opportunity for the participants to exchange information and observe firsthand new technology, equipment, and innovations that are being used in the mining industry. Industry and other technical presenters will provide presentations, exhibits, and equipment displays that allow the participants to interact in small groups with the presenters and each other.

Contents:

- ◆ Equipment Brake Systems
- ◆ Equipment Safety Instructions
- ◆ Tire Care and Maintenance
- ◆ Crane Safety
- ◆ Cab Ergonomics
- ◆ Discriminating Alarm Systems
- ◆ Dump Point Safety
- ◆ Diesel-Electric Equipment
- ◆ Fire Suppression on Haulage Equipment
- ◆ Haul Roads - Keys to Accident Prevention
- ◆ Hazards and Accident Prevention in Belt Conveyor Operations
- ◆ Specific Equipment Systems (Loaders, Trucks, Dozers, Shovels)
- ◆ Loss Prevention - Haulage
- ◆ New Automation Technologies - Conveyors, Plants, Mills
- ◆ Safe Handling and Transport of Bulk Blasting Agents
- ◆ Safety Aspects of Mounting/Demounting Tires
- ◆ Haul Road Design

Technical Coordinator: Wayne L. Lively

Course Length: 2½ days

Tuition: None

Dates: March 9-11, 2004

TRAM/NATIONAL MINE INSTRUCTORS SEMINAR [GS501G04]

This seminar provides opportunities for health and safety trainers to improve their training programs with new materials and new ideas. The seminar will also include an exhibit of training materials developed by MSHA, state grants recipients, and the mining industry. Small workshops allow participants to interact with workshop leaders and other participants.

Contents:

- ◆ Innovative Instructional Techniques
- ◆ Instructional Technology and Computer Applications
- ◆ Underground Mine Safety (Metal/Nonmetal and Coal Topics)
- ◆ Surface Mine Safety (Metal/Nonmetal and Coal Topics)
- ◆ General Safety
- ◆ Health
- ◆ Ergonomics
- ◆ Supervisory Issues

Another feature of the seminar is the Training Materials Competition. Health and safety training materials entered in the competition will be judged and winners will be announced at the Seminar. All materials entered in the competition will be displayed.

Technical Coordinator: Sharon T. Casto

Course Length: 2½ days

Tuition: None

Dates: October 14-16, 2003

October 12-14, 2004

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TECHNICAL SPECIALISTS TRAINING

MSHA mine safety and health inspectors, supervisors, specialists, administrative, and clerical personnel are to receive a minimum of two weeks advanced training every two years.

Listed below are the groups and dates for which training sessions have been scheduled at the Academy:

Accident Investigators [IV401G04 - 49 hours]

Coordinator: Kenneth M. Scott
February 18-26, 2004

Administrative/Clerical Personnel

[GS711G04 - 21 hours]

Coordinator: Judy Burns
March 30 - April 1, 2004
May 11-13, 2004
June 29 - July 1, 2004
August 10-12, 2004

Electrical Specialists

Coordinator: Ed Newcomb
February 3-12, 2004 (MNM) [EL401M04 - 56 hours]
April 27 - May 6, 2004 (COAL) [EL401C04 - 56 hours]

Health Specialists [IH401G04]

Coordinator: William D. McKinney
(Dates not available at time of publication)

Impoundment Specialists [IM401C04 - 21 hours]

Coordinator: Tom Bonifacio
March 16-18, 2004

MNM Journeyman Mine Safety and Health Inspectors

[LP311M04 - 56 hours]

Coordinator: Tom Bonifacio

December 2-11, 2003

January 6-15, 2004

March 30 - April 8, 2004

Roof Control Specialists [RC401C04 - 21 hours]

Coordinator: John Rosiek

April 6-8, 2004

Surface Coal Mine Safety and Health Inspectors

[LP312C04 - 56 hours]

Coordinator: John Tyler

October 26 - November 4, 2004

Underground Coal Mine Safety and Health Inspectors

[LP311C04 - 56 hours]

Coordinator: Richard McDorman

May 18-27, 2004

June 8-17, 2004

July 20-29, 2004

October 19-28, 2004

Ventilation Specialists [VN401C04 - 21 hours]

Coordinator: Scott Mandeville

December 16-18, 2003

August 31 - September 2, 2004

October 5-7, 2004

SUPERVISORY TRAINING
COAL AND METAL/NONMETAL
[GS451G04]

Coordinators: John Rosiek
Janet Bertinuson
Sharon Casto

January 6-15, 2004
May 18-27, 2004
July 13-22, 2004
August 3-12, 2004

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OCTOBER 2003

October 13 - 17, 2003

- ◆ TRAM/National Mine Instructors
Seminar.....10/14-16/03

October 20 - 24, 2003

- ◆ Microsoft® Access 2002 - Basic10/21-23/03
- ◆ Blasting (Surface).....10/21-23/03

October 27 - 31, 2003

- ◆ Electrical Hazards.....10/28-30/03
- ◆ Microsoft® Excel 2002 - Basic10/28-30/03

NOVEMBER 2003

November 10 - 14, 2003

- ◆ Qualification for Impoundment
Inspection.....11/13/03

November 17 - 21, 2003

- ◆ Instructor Training Workshop
(Part 48).....11/17-20/03

DECEMBER 2003

December 1 - 5, 2003

- ◆ Microsoft® Word 200212/02-04/03

December 15 - 19, 2003

- ◆ Microsoft® PowerPoint 200212/16-18/03
- ◆ Annual Retraining for Impoundment
Qualification.....12/17/03

JANUARY 2004

January 5 – 9, 2004

- ◆ Microsoft® Access 2002 – Intermediate..01/06-08/04
- ◆ Mine Accident Investigation and
Report Writing.....01/06-15/04

January 12 – 16, 2004

- ◆ Microsoft® Windows 2000/Microsoft®
Outlook 2002.....01/13-14/04
- ◆ Microsoft® Excel 2002 – Intermediate..01/13-15/04

January 19 – 23, 2004

- ◆ Mine Blasting Safety and
Application Seminar.....01/21-23/04

January 26 – 30, 2004

- ◆ Microsoft® Access 2002 – Advanced..01/27-29/04
- ◆ Noise Hazards, Regulations,
and Control.....01/27-29/04

FEBRUARY 2004

February 2 – 6, 2004

- ◆ Microsoft® Access 2002 – Basic02/03-05/04

February 9 – 13, 2004

- ◆ Microsoft® Excel 2002 – Basic02/10-12/04
- ◆ Microsoft® Word 200202/10-12/04

February 16 – 20, 2004

- ◆ Microsoft® Windows 2000/
Microsoft® Outlook 200202/18-19/04
- ◆ Accident Investigation Retaining
Seminar.....02/18-26/04
- ◆ Root Cause Analysis Workshop.....02/19/04
- ◆ Qualification for Impoundment
Inspection.....02/19/04

February 23 - 27, 2004

- ◆ Microsoft® PowerPoint 200202/24-26/04

MARCH 2004

March 1 - 5, 2004

- ◆ Blasting (Surface).....03/02-04/04
- ◆ Electrical Hazards.....03/02-04/04
- ◆ Microsoft® Word 200203/02-04/04
- ◆ Underground Haulage, Transportation,
and Machinery.....03/02-03/04
- ◆ Annual Retraining for Impoundment
Qualification.....03/03/04

March 8 - 12, 2004

- ◆ Coal Impoundment and Refuse Pile
Inspection.....03/09-11/04
- ◆ Surface Haulage Safety Seminar.....03/09-11/04

March 15 - 19, 2004

- ◆ Microsoft® Access 2002 - Intermediate..03/16-18/04
- ◆ Mine Accident Investigation and
Report Writing.....03/16-25/04

March 22 - 26, 2004

- ◆ Microsoft® Access 2002 - Advanced..03/23-25/04

APRIL 2004

April 12 - 16, 2004

- ◆ Microsoft® Windows 2000/Microsoft®
Outlook 2002.....04/13-14/04
- ◆ Slope and Shaft Sinking Safety.....04/13-14/04
- ◆ TapRoot® System Accident/Incident
Investigation Training.....04/13-15/04

April 12 - 16, 2004 (*continued*)

- ◆ Underground Diesel Equipment/
Ventilation.....04/13-15/04
- ◆ Mine Construction, Maintenance,
and Repairs Safety Workshop.....04/13-15/04

April 19 - 23, 2004

- ◆ Microsoft® Excel 2002 - Intermediate..04/20-22/04

MAY 2004

May 3 - 7, 2004

- ◆ Qualification for Impoundment
Inspection.....05/05/04

May 10 - 14, 2004

- ◆ Instructor Training Workshop
(Part 48).....05/10-13/04
- ◆ Underground Haulage, Transportation,
and Machinery.....05/11-12/04

May 17 - 21, 2004

- ◆ Mine Accident Investigation
Techniques.....05/18-20/04

May 24 - 28, 2004

- ◆ Microsoft® Word 200205/25-27/04
- ◆ Microsoft® Access 2002 - Basic05/25-27/04

JUNE 2004

May 31 - June 4, 2004

- ◆ Root Cause Analysis Workshop.....06/01/04
- ◆ Explosion Prevention.....06/02-03/04
- ◆ Roof Control Seminar.....06/02-03/04

June 7 - 11, 2004

- ◆ Slope and Shaft Sinking Safety.....06/08-09/04
- ◆ Microsoft® Access 2002 - Intermediate..06/08-10/04

June 14 - 18, 2004

- ◆ Microsoft® Excel 2002 - Basic06/15-17/04
- ◆ Annual Retraining for Impoundment
Qualification06/16/04

June 21 - 25, 2004

- ◆ Microsoft® PowerPoint 200206/22-24/04
- ◆ Microsoft® Word 200206/22-24/04

JULY 2004**July 12 - 16, 2004**

- ◆ Mine Accident Investigation and
Report Writing.....07/13-22/04
- ◆ Qualification for Impoundment
Inspection.....07/14/04

July 26 - 30, 2004

- ◆ Electrical Safety for Metal/
Nonmetal Miners.....07/27-28/04
- ◆ Microsoft® Access 2002 - Advanced ..07/27-29/04

AUGUST 2004**August 2 - 6, 2004**

- ◆ Instructor Training Workshop
(Part 48).....08/02-05/04
- ◆ Microsoft® Windows 2000/
Microsoft® Outlook08/03-04/04
- ◆ Haulage (Surface).....08/03-05/04

August 16 - 20, 2004

- ◆ Microsoft® Excel 2002 - Intermediate ..08/17-19/04
- ◆ Mine Construction, Maintenance,
and Repairs Safety.....08/17-18/04
- ◆ Longwall Mining and Inspection
Procedures.....08/17-19/04

August 16 – 20, 2004 (continued)

- ◆ Annual Retraining for Impoundment
Qualification.....08/18/04

August 23 – 27, 2004

- ◆ Microsoft® Word 200208/24-26/04
- ◆ Underground Diesel Equipment/
Ventilation.....08/24-26/04

SEPTEMBER 2004

August 30 – September 3, 2004

- ◆ Industrial Hygiene.....8/31-09/02/04

September 6 – 10, 2004

- ◆ Blasting (Underground).....09/08-09/04

September 13 – 17, 2004

- ◆ Electrical Safety for Coal Miners..09/14-16/04
- ◆ Haulage (Surface).....09/14-16/04
- ◆ Microsoft® PowerPoint 200209/14-16/04
- ◆ Mine Accident Investigation and
Report Writing.....09/14-23/04

September 20 – 24, 2004

- ◆ Microsoft® Word 200209/21-23/04
- ◆ Respirable Coal Mine Dust Sampling
Certification.....09/21/04
- ◆ Respirable Coal Mine Dust Sampler
Calibration/Maintenance Certification..09/22/04

September 27 – October 1, 2004

- ◆ Electrical Safety for Metal/
Nonmetal Miners.....09/28-29/04
- ◆ Mine Construction, Maintenance,
and Repairs Safety.....09/28-29/04

September 27 - October 1, 2004 (*continued*)

- ◆ Hoists and Elevators.....09/28-30/04
- ◆ Introduction to Mining.....09/28-30/04

OCTOBER 2004

October 11-15, 2004

- ◆ TRAM/National Mine Instructors
Seminar.....10/12-14/04

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SUGGESTION FORM FOR NEW COURSES

The National Mine Health and Safety Academy is committed to bring you the very best courses, seminars, and materials to meet your needs. To do this we need your help.

Please use the space below to let us know what you would like.

New courses or variations on existing courses:

Seminars: _____

Materials: _____

Area of interest: ***Circle those of interest.***

Coal - Surface

Coal - Underground

Metal/Nonmetal - Surface Metal/Nonmetal - Underground

Both

Other (*specify*) _____

Name _____

Address _____

Telephone _____ Fax: _____

(*area code*)

(*area code*)

Please complete this form and return to:

**National Mine Health and Safety Academy
ATTN: Department of Instructional Services
1301 Airport Road
Beaver, West Virginia 25813-9426**

OR

FAX: (304) 256-3247

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ENROLLMENT FORM

Please complete this form and return to:

National Mine Health and Safety Academy
ATTN: Student Services Branch
1301 Airport Road
Beaver, West Virginia 25813-9426

OR

FAX: (304) 256-3251

I plan to attend the _____
(Name of Course)

course on the following dates: _____

Arrival Date: _____

Departure Date: _____

☐ I will ☐ I will not need lodging on these
dates.

Name: _____

Title: _____

Organization: _____

Address: _____

City: _____

State: _____ Zip Code: _____

Telephone: _____ Fax: _____
(area code) *(area code)*

Confirmation will be mailed or faxed to you.

Confirmed by: _____ Date: _____

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OTHER AVAILABLE CATALOGS

The Academy also publishes a **Catalog of Training Products for the Mining Industry**. To obtain a copy of the products catalog, or additional copies of this catalog, please complete this form and return to:

**National Mine Health and Safety Academy
ATTN: Printing and Property Management Branch
Department of Instructional Materials
1301 Airport Road
Beaver, West Virginia 25813-9426**

CALL: (304) 256-3257

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**Please note: Catalogs referred to on this page
are also available online at www.msha.gov**